State of Colorado's Water Supply Model (StateMod) Version 13.00.00

The State of Colorado's Stream Simulation Model (StateMod) is a monthly water allocation and accounting model capable of making comparative analyses of various historic and future water management policies in a river basin. It is designed to be applied to any river basin through appropriate input data preparation. The following sections are available in this manual:

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cdssnews@state.co.us
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1.0 Acknowledgment

The State of Colorado's Stream Simulation Model (StateMod) was developed from a model developed previously for the State of Colorado as part of the Green Mountain Pump Back and Exchange Project (Boyle Engineering Corporation, 1986). The model enhancement, support, and renaming by the State of Colorado occurred to provide additional capabilities. Following are the key enhancements made to the 1986 version which are currently included in StateMod while **Table 1.1** summarizes the major enhancements associated with each version:

- Documentation has been prepared.
- Daily simulation capability has been added.
- Well simulation has been added.
- The modified direct solution algorithm (Bennett, Ray R., December 2000) has been added that allows the model to operate with a variable efficiency and soil moisture storage.
- A Graphical User Interface (GUI) has been developed.
- Input files have been reformatted to allow character identifications which are consistent with the State, USGS, and NOAA station naming conventions.
- Output files have been revised to include the following options: detailed accounting of a direct flow, instream flow, wells and reservoir operations; a water balance, an operational rule summary, and formatted output for use by spreadsheet plotting packages.
- Instream Flows may be treated as a reach rather than a series of discrete points.
- The Base Flow module has been completed and is now fully operational for gaged locations.
- The Base Flow module has been enhanced to allow baseflows to be estimated at ungaged locations.
- The Base Flow module has been enhanced to allow baseflows to be estimated at gaged locations when gaps exist in the streamflow data. This allows gaged data to be adjusted for mans impact prior to filling gaps using a technique such as regression.
- Reservoirs may be operated to meet forecasted or predefined target storage contents.
- Reservoir administration associated with the one fill rule has been incorporated through user supplied data.
- The return flow algorithm has been revised to account for the number of days in a month when estimating future returns.
- The water allocation routine has been revised to reoperate whenever a reservoir makes additional water available or a diversion's return flows do not accrue to a downstream node.
- The reservoir operation routines have been revised to operate in accordance with a strict interpretation of the prior appropriation doctrine.
- Reservoir releases to diversions may replace either the full headgate diversion or their consumptive use.
- The reservoir operating routine that allows diversions into a carrier canal which serve one or more diversions and/or reservoirs has been revised. This routine now considers the demand of each structure to be served as well as the available capacity of the carrier structure(s).

- The reservoir operating routine that allows a reservoir to reservoir transfer has been revised. This transfer may now involve a physical exchange or a paper exchange (bookover) from one reservoir account to another.
- An operating rule has been implemented which allows an instream flow to operate based on the flow at a river location that is different than the location of the instream flow.
- New operating rules have been developed to accommodate futile calls, interruptible supplies, the La Plata and Rio Grande Compact operations, the San Juan basin recovery implementation plan.
- Allows system losses and ground water salvage to be calculated.
- Project specific coding associated with the Colorado River Basin and the Green Mountain Pump Back and Exchange Project have been removed and incorporated into general operating rules controlled by user specified data.
- Plan structures implemented to model augmentation plan operations, terms and conditions, and water reuse.
- Operating rules developed to allow pro-rata diversion of water rights with augmentation station operations, including leaving ditch losses in the ditch and calculating terms and conditions (e.g., return flow obligations) based on simulated diversions.
- An operating rule has been implemented to represent upstream storage statute in which water can be stored out-of-priority to a senior downstream storage right provided said water is released to the senior reservoir if it is not filled in priority. This rule has been used to represent the Blue River Decree in the Upper Colorado Model.

Table 1.1
Major StateMod Enhancements

Version	Year	Areas of Key Enhancements
2. – 4.	1995	Baseflow module enhancement New reporting capabilities
5.	1996	Allow multiple replacement reservoirs Reoperate for non downstream return flows
6.	1996	Enhanced binary file reporting. New reporting capabilities
7.	1997	Treat Instream flows as a Reach Linked model capability
8.	1998	Daily simulation capability
9.	1999	Well simulation capability
10.	2001	Variable efficiency capability
11.	2006	Plan structure type added. New operating rule data that allow carrier losses, annual limits and on/off dates
12.	2007-2008	Irrigation Practice File is allowed to contain 4 water supply irrigation method combinations (Surface Water Flood, Surface Water Sprinkler, Ground Water Flood and Ground Water Sprinkler). Expanded the ability to divert to and from plans.

2.0 Introduction

The State of Colorado's Stream Simulation Model (StateMod) is a monthly or daily water allocation and accounting model capable of making comparative analyses for the assessment of various historic and future water management policies in a river basin. It is designed to be applied to any river basin through appropriate input data preparation.

This document was prepared to explain the features and functions of StateMod and presumes the reader has a basic understanding of river operations. It is current for **StateMod version 12**. The documentation is intended for use by engineers, water resource planners or anyone involved in water management decision making. It is structured such that Sections 1 - 3 will stand alone to provide a general description of the model and its features. Sections 4 – 11 and Appendix A and B provide the detail required to develop data sets and implement the model in a river basin.

StateMod's operation, like the stream itself, is governed by its hydrology, water rights, and the associated structures and operating rules. It recognizes five (5) types of water rights: direct flow rights, instream flow rights, reservoir storage rights, well rights, and operational rights. Each of the water rights is given an administration number (rank) and location in the stream system. The model then sorts the water rights by rank and simulates their operation by priority using the Prior Appropriation Doctrine (first in time, first in right). The water right categories are self explanatory with the possible exception of the operational rights, which generally pertain to reservoir operating policies, exchanges, carrier ditch systems, and terms and conditions associated with a water rights operation.

The key components of StateMod are as follows:

- **Daily or Monthly Time Step**. Simulates in a monthly or daily time step. For a daily simulation, input data requirements may be simplified by allowing the user to: 1. Provide daily data, 2. Estimate daily data by requesting the model divide a monthly value by the number of days in a month, 3. Estimate daily data by requesting the model use a monthly average, or 4. Estimate daily data by requesting the model use monthly data and another gages daily distribution. Daily baseflow data may be developed directly or estimated from monthly baseflow estimates.
- **Network System**. Simulates tributaries and main stem river systems through the use of a tree structured network system.
- **Prior Appropriation Doctrine**. Simulates direct flow, instream flow, storage well and operational rights under the Prior Appropriation doctrine (*First in time First in Right*) as a function of water availability, priority, decreed amount, demand, structure capacity and location.
- **Operational Rules**. Simulates a wide variety of operating agreements and exchanges between one or more structures.
- **Return Flows**. For a given structure, simulates one or more return flow patterns returning to one or more stream nodes to represent the impact of surface and ground water returns on stream operations.

- **Instream Flows**. Simulates Instream Flows as a reach or point.
- **Wells**. Simulates wells as the sole source to a water user or as a supplemental supply.
- **Plans**. Simulates terms and conditions associated with a water transfer, reusable water supplies or out-of-priority well pumping.
- **Base or Natural Flows**. Estimates a base or natural streamflow from gaged or estimated streamflow, diversion and reservoir data.
- **Modified Direct Solution Algorithm**. Uses an efficient, Modified Direct Solution Algorithm (Bennett, Ray R., December 2000), which allows variable efficiency, soil moisture accounting and immediate (current time step) return flows to be evaluated without having to iterate.
- **Variable Efficiency**. Allows the user to simulate water use by specifying an average or variable efficiency.
- **Soil Moisture Accounting**. Simulates soil moisture inflow, use and storage.
- **Transmountain Diversions**. Simulates transmountain imports and diversions from a basin.
- **Call Reporting**. Estimates the calling structure and calling right.
- **Graphical User Interface (GUI).** Includes a comprehensive GUI (SMGUI) that allows: 1. Input data to be viewed, edited, and graphed 2. Output data to be viewed and graphed, 3. Map based depiction of basin, hydrology, structure locations, etc.
- **Data Centered Approach.** The entire system operates as a data centered component with a direct link the CDSS database (HydroBase). By providing a list of structures to HydroBase input files can be created and formatted for model input to ensure results are reproducible and easily refreshed for a new study period or database updates**.**
- **Error Checking**. Performs extensive input data error checking throughout the program.

The following definitions are provided in order to define commonly used terms throughout model documentation:

- Baseflow – Represents basin streamflows absent man's influence including diversions, return flows, reservoir operations and pumping. If 100% of man's influence is removed, baseflows are often called virgin flows or natural flows.
- Physical Flow and Available Flow – Physical flow represents the amount of water in the stream that occurs at, or above, the node. The physical flow legally available for diversion at a node is termed the available flow. Available flow is the portion of the physical flow that is not required to meet downstream senior water rights. The Modified Direct Solution Algorithm (see Section 7.9) identifies the minimum available flow at all downstream nodes in order to determine the available flow at node that can be diverted.
- Model Calibration – Calibration is the process of simulating the river basin under historical conditions, and judiciously adjusting parameter estimates to achieve agreement between observed and simulated values of streamflow gages, reservoir levels, and diversions.
- Diversion structures – Represent structures located on the river, such as diversion headgates, pumps and carrier ditches where water is diverted from the river to meet a diversion demand.
- Reservoir Structure – Represent storage structures located on or off channel that divert water from the river using reservoir storage rights.
- Demand Structure – Represent structures located on the river or off channel that have a demand, which can be met by a different structure such as a carrier, reservoir, or wells.
- Instream Flow Structure or Instream Flow Point – Represents a reach on the river (e.g. from tributary headwaters to confluence with main stem river) or a river location (e.g. wastewater treatment plan outfall) where instream flow demands exist.

- Plan Structure – Represents a structure used to account for 1. Augmentation Plans, 2. Terms and Conditions associated with a water transfer, and 3. Reusable water supplies.
- Unit Response Function – Represent when return flows or depletions will impact the river over time. For example a power plant diversion may have an immediate unit response function while an irrigation diversion or well pumping may have a lagged unit response function.
- Efficiencies – Define the amount of diverted water that is consumed versus the amount supplied. When the water supply is at the source (headgate or well head) it is called System Efficiency. System efficiency is commonly split into conveyance efficiency (representing diversions less ditch loss) and application efficiency (representing water use less application loss).
- Consumptive Water Requirement (CIR) – The amount of water required for consumption by an irrigation, municipal or instream use. The CIR excludes any conveyance or application efficiencies. For a irrigation demand it is often called Irrigation Water Requirement (IWR), the potential evapotranspiration less effective precipitation

StateMod consists of four (4) major components: the Base Flow module, the Simulation module, the Report module, and the Data Check module.

1. The Base Flow module produces a set of streamflows that would have occurred in the basin without a user-specified level of man's development. For example, if a user supplied data that allows 100% of man's influence to be removed, the base flow developed would represent natural stream flows. On the other hand if a user supplies data that allows only 80% of mans influence to be removed, the baseflow developed would represent something in-between (e.g. 80%) natural and developed. The latter in-between approach is often used as a cost effective measure to simplify baseflow development by including relatively large projects and excluding smaller, less significant developments. Note that any developments not included in the baseflow calculation are not ignored, instead their impact on the system is included in the in-between baseflow estimate.
2. The Simulation module operates the river system and accounts for inflows, river gains, diversions, instream flows, well pumping, and reservoir operations.
3. The Report module processes the results of the Simulation module into user specified reports and graphs data sets.
4. The Data Check module reads the input files and performs various data checks.

Following is a general sequence for operating StateMod:

1. Develop a stream node network based on the location of key gages, river confluences, reservoirs, diversions, wells, and instream flows.
2. Construct the necessary monthly input files using the formats described in Section 4.0.
3. Check the input files by executing StateMod's Data Check Module.
4. Develop base stream flows by executing StateMod's Base Flow Module.
5. Simulate the stream system's operation by executing StateMod's Simulation Module.
6. Evaluate results and generate graphs and tables by executing StateMod's Report Module.
7. If desired, add daily simulation capability.

The remainder of this document is organized as follows:

Section	Title	Description
3.0	Model Description	Describes the theoretical basis of river operations, water allocation and reservoir operations
4.0	Input Description	Describes the input format for each data set
5.0	Output Description	Describes the contents of the various outputs files
6.0	Model Operation	Describes the model's operation from both the screen or command line arguments
7.0	Technical Notes	Describes technical details of selected portions of the programs operation
8.0	Frequently Asked Q's	Describes frequently asked questions regarding the model's operation
Section	**Title**	**Description**
9.0	Supporting Utilities	Describes supporting utilities available to assist in developing a StateMod data set
10.0	Discontinued but Supported Files	Describes discontinued but supported data file formats
11.0	Release Notes	Describes major changes enhancements associated with a release version
Appendix A	Examples	Presents several examples which demonstrate some of the capabilities of the model through input files and results
Appendix B	Procedures Manual for a Data Centered Approach to StateMod	Presents a sequential approach to develop StateMod data files using a data centered approach

3.0 Model Description

The State of Colorado's Stream Simulation Model (StateMod) is capable of simulating stream diversions, instream demands, well pumping, reservoir operations and river flows on a monthly or daily basis for any stream system using user specified data. To facilitate this simulation, the river basin is divided into a series of river nodes which generally represent gauging stations, river confluences, diversion structures and reservoirs. Accounting is performed on a water right basis while reporting is performed by structure and each river node. The following sections are available in this chapter:

- 3.1 Stream Flow Allocation
- 3.2 System Operation
- 3.3 Model Application
- 3.4 Daily Operations
- 3.5 Variable Efficiency
- 3.6 Demands
- 3.7 Soil Moisture Accounting
- 3.8 Wells
- 3.9 Plans

3.1 Stream Flow Allocation

StateMod allocates water to a diversion, instream flow, or reservoir based upon physically available river flow, legally available flow (priority), decreed right, delivery capacity and demand. Because a well may pump water from ground water storage, StateMod allocates water to a well using the same constraints described previously except it is not limited to physical availability of flow in the river. If current or future depletions caused by wells exceed the available flow, the water supply is identified as coming from ground water storage. Demand is an input to StateMod that describes the time varying desire to divert water. It is typically estimated outside the model to reflect historic or future demands associated with agricultural, municipal, and industrial water needs.

The water allocation scheme used in StateMod is the Modified Direct Solution (MDSA) algorithm (Bennett, Ray R., December 2000) that recognizes the impact of a diversion's return flows even when they occur in the same month or day that they were diverted. The MDSA allows water use efficiencies to vary up to a user specified maximum and account for soil moisture contents. The MDSA eliminates the need to iterate between time steps unless reservoir operations (see Section 3.2, Reservoir Operations) or return flows that do not accrue to a downstream node make new water available to the system. Following is an abbreviated description of the stream allocation scheme:

1. Water availability is determined at each river node to include both native inflows and return flows accruing from a prior time step.
2. The most senior direct, instream, storage, well or operational water right is identified.
3. Diversions are estimated to be the minimum of the decreed water right, structure capacity, demand, and available flow in the river. For a direct flow or reservoir right, the available flow in the river is the minimum of the diverting or downstream node plus any of the diverting right's return flow to that node. For an instream right, the available flow in the river is the flow at each river node within the instream reach. For a well, pumping is not constrained by the available flow in the river since pumping may deplete ground water storage.
4. Downstream flows are adjusted to reflect the senior diversion and its return flows.
5. Return flows for future time periods are determined and stored.
6. Well depletions for future time periods are determined and stored.
7. The process is repeated by priority for each successive direct, instream, storage, well and operational water right.
8. If new water is introduced to the system from a reservoir's operation or return flows accrue to a non-downstream node, the model reoperates the current time step and the process is repeated beginning with the most senior direct, instream, storage or operational right.
9. The process is repeated for each month or day of the study period.

3.2 System Operations

System operations describe how direct, instream, well and storage rights interact with a water right owner's preferences. Reservoirs store water based on physically available river flow, legally available flow (priority), decreed right, storage capacity, demand, and operating rules. A balance is computed which accounts for the inflows and outflows from a reservoir including natural inflow, pumped inflow, controlled releases, spills, net evaporation and seepage. Downstream river flows associated with a reservoir storage or release are adjusted using the same water allocation procedure outlined in the previous section.

Water is released from a reservoir to satisfy an owner's demand, exchange agreement, augmentation requirement, hydropower goals or target storage values. Reservoirs may have one or more ownership accounts and may be located on the main channel or off-channel. Standard operating policies associated with most river basins are included within StateMod as described in Section 4.

System operations, return flows to non-downstream river nodes, and well pumping have the potential to add additional water to a river which might be available to a senior water right. For example, when a reservoir releases water to meet a target storage level, additional water may become available to a senior downstream right. Similarly, if a ditch returns water to a neighboring non-downstream tributary, those return flows may be used by a senior ditch on that tributary. Finally when the return flow associated with well pumping exceeds its depletion to the river, additional water may become available to a senior downstream right. When such a system operation, non downstream return flow or net accretion occurs, the model automatically reevaluates all water rights in priority in order that senior rights may benefit from the additional water supply.

3.3 Model Application

This section describes the procedure for applying the river and system operations previously described. Sample input and output files are presented in Appendix A. Data files used to drive the model are described in Chapter 4.

StateMod is structured to perform one of 4 interrelated activities:

Base Flows

Simulate

Report

Data Check

The **Base Flow Module** creates a set of "base streamflows" which have the impact of historic diversions, return flows, well pumping, and reservoir storage, release, evaporation and seepage removed. The generation of a "base streamflow" sequence is necessary for a basin planning model in order to analyze a "What If" scenario which includes a proposed water right or operating strategy that may impact historic river operations. This module may be executed by the user to develop a "natural streamflow" sequence if all impacts of man are removed or a "base streamflow" sequence if only selected impacts of man are removed. When the user selects to generate a "base streamflow" rather than a "natural streamflow" sequence, they are implicitly assuming the historic diversion and reservoir operation impacts which are left in the gage will not change significantly under a What If scenario. By including this component within the model, data preparation requirements are reduced significantly and future simulated return flow patterns are, where appropriate, consistent with the base or natural streamflow generation. Note, the base flow module may be executed with missing streamflow data (specified by -999) to allow man's impact to be removed prior to filling missing data gaps using a technique such as regression.

The **Simulate Module** operates the river based on user specified water rights and operating criteria. It begins by reading data that is constant over time such as the river network, reservoir structures, diversion structures, instream flow structures, well structures and water rights. Time varying data such as streamflow, demands and climate data are read. Then for every simulation time step, direct, instream, storage, well and operational rights are simulated from the most senior to junior priority. At the end of each month, results are printed for each river node to a direct access binary file. If a simulation only option is chosen, then the program is complete and detailed reports may be obtained through the Report module. If a simulation plus report option is chosen, then at the end of the simulation period, the binary file is read to produce detailed monthly or daily results in a tabular form for each diversion, instream flow, well structure, reservoir and gage as follows:

<u>Monthly Outputs</u>

- File *.xdd containing detailed diversion and instream flow results.
- File *.xre containing detailed reservoir results.
- File *.xwe containing detailed well structure results.
- File *.xif containing detailed instream flow reach results.
- File *.xop containing detailed operational right results.
- File *.xss containing detailed structure results.
- File *.xpl containing detailed plan structure results.

Daily Outputs

- File *.xdy containing detailed diversion and instream flow results.
- File *.xry containing detailed reservoir results.
- File *.xwy containing detailed well structure results.

Appendix A has examples of each of these files. Note the detailed diversion and instream file (*.xdd) includes information for each river node. Therefore, data associated with the river at every structure, stream gage, confluence, etc. is included. The other standard reports include additional information for a particular structure type or operational activity. For example, the reservoir report includes data for each reservoir account while the instream flow report includes data for each node within an instream flow reach.

The **Report Module** reads the direct access, binary file generated by the simulate module to produce user specified reports and files which may be imported to a number of common spreadsheet packages such as Excel for graphing. Following are the standard reports available:

Monthly Reports

- Diversion Summary (*.xdd),
- Reservoir Summary (*.xre),
- Operational Right Summary (*.xop),
- Instream Flow Summary (*.xif),
- Well Summary (*.xwe),
- Plan Summary (*.xpl),
- Binary File Data (*.xbn),
- Water Balance (*.xwb),
- Water Rights List (*.xwr),
- Graph Data for Diversions and Gages (*.xdg),
- Graph for Well Structures (*.xwg),
- Graph Data for Reservoirs (*.xrg),
- Supply (total diversion), shortage and consumptive use summaries (*.xsu, *.xsh, *.xcu),
- Selective Output.

Daily Reports

- Diversion Summary (*.xdy),
- Reservoir Summary (*.xry),
- Well Summary (*.xwy).

The **Data Check Module** echoes the streamflow and diversion data, prints a comprehensive list of all water rights sorted by priority, tabulates input data for simplified reporting, and performs selected data checks of the input files including:

- The Stream network is properly connected,
- Return flows return to a stream node,
- Return flow delay tables total 100% (including loss),
- The distribution of return flows to river nodes or losses equals 100%,
- Wells have both a return flow and depletion table,
- Water rights are assigned to a structure or operation,
- Structures have a water right,

- Demands are assigned to a structure,
- Structures have a demand or operation,
- Area Capacity tables increase,
- Operational rights are properly specified.

Time varying data files (streamflow, demands, precipitation, etc.) have data for the selected study period and year type including: Calendar Year (January through December), Water Year (October through September) and Irrigation Year (November through October).

3.4 Daily Operations

StateMod can operate on a monthly or daily time step. (See Section 8.7 for a discussion of how to change a monthly model to a daily model). For simplicity StateMod estimates every February has 28 days, therefore any daily data provided for February 29 in a leap year is ignored. The daily capability can be implemented directly or by building upon a monthly model. Constructing a monthly model first is recommended for the following reasons:

- The most difficult part of developing a basin model is understanding the system. By first developing a monthly model, the system operation can be investigated without burdening the user with the volume of information ultimately required for a daily model.
- A daily model is typically developed to be able to simulate large and small flow events that occur within a monthly time step. Therefore, although daily streamflow data will be required, the user may want to estimate the other terms required for daily analysis, such as diversion demands or reservoir targets, using a simplified approach. The ability to supply a simple distribution method to estimate daily data includes the following options:

  1. Divide a monthly estimate by the number of days in a month or
  2. Set daily data to a monthly average or
  3. Use another gages daily distribution or
  4. Use a pattern developed by connecting the midpoints of monthly data (common for demand data) or
  5. Use a pattern developed by connecting the endpoints of monthly data (common for reservoir data).

- Daily baseflows may be developed directly as daily data or estimated from monthly baseflow estimates.
- For the case where a structure has both daily and monthly data which do not equal, the distribution method described above specifies which controls. This approach provides maximum flexibility to assign daily data.
- The routing of daily streamflows is accounted for by the gain and loss term that results from the base (natural) stream flows estimated by or provided to the model.
- Routing of reservoir releases are not included because 1. StateMod is a primarily a planning model, 2. The additional detail required to properly implement reservoir releases with a travel time component is not justified since the system would have to include some kind of forecasting to know a reservoir release is required before a reservoir demand occurs and 3. The volume of water potentially delivered early by ignoring a reservoir's travel time is offset by the potential over release that occurs after the demand is satisfied.

3.5 Variable Efficiency

StateMod allows water use efficiency to vary from 0 to a user specified maximum value. The following are noted:

- Variable efficiency uses the Modified Direct Solution Algorithm (Bennett, Ray R., December 2000, Section 7.9).
- Variable efficiency requires consumptive water requirement data be provided for every diversion and well only structure by year. If not provided, it is estimated from the average efficiency data provided in the station file(s) and demand data.
- Variable efficiency for wells may include a value for both flood and sprinkler applications if the acres served by sprinklers are provided.
- Variable efficiency operations may include soil moisture accounting although it is not required.
- Variable efficiency capability applies to all direct diversion, well pumping and carrier to diversion structure operations.
- Variable efficiency capability does not apply to reservoir releases. These operating rules continue to use the average efficiency data provided in the diversion station file (*.dds) to determine the structure's demand from the reservoir.

3.6 Demands

StateMod provides several methods to simulate structure demands. The selection of a demand approach is relatively simple for a system with surface water only. However for a system with both surface and ground water selecting an appropriate demand approach can be critical because diversions, wells and reservoir data often have different water use efficiencies. The following are noted (see Section 7.10 for additional details):

- Demand data may be provided at the supply point (includes inefficient water use) or as a consumptive requirement (includes no inefficient water use). When demands are provided as a consumptive requirement, the model adjusts the demand on-the-fly to include the inefficiencies associated with the water supply source (surface diversion or well) being simulated.
- Demand data can be provided for diversions and wells separately or as a single value that may be served from surface or ground water supplies. The ability to separate or combine demands based on source allows the flexibility to perform both historic and calculated calibration.
- Demands that can be served by both surface and ground water may be simulated using a Maximum Demand Approach. This approach 1. Allows a structure to divert surface water up to their decreed amount and 2. Limits ground water pumping to the consumptive requirement. This approach allows a user to divert surface water that may result in a relatively low water use efficiency but use ground water, as needed, at a relatively high efficiency.

3.7 Soil Moisture Accounting

The State Model has the ability to include soil moisture as a water supply. The following are noted (See Section 7.13 for additional details):

- The soil moisture capacity is calculated as follows:

$SM = D * A * C$

Where,
SM = Soil Moisture
D = Soil Depth (average soil depth provided for all structures in the control (*.ctl) file)
A = Area (data provided by structure in the annual time series (*.ipy) file)
C = Soil Moisture Capacity (data provided by structure in the soil parameter (*.par) file)

- The Soil Moisture option allows water to be stored in the soil zone up to its capacity and the diverting structures (direct diversion or well) efficiency.
- StateMod initializes the soil moisture reservoir contents to be 50% of the soil moisture capacity.
- If the irrigated area of a structure is reduced from one year to the next and the resulting soil moisture capacity is exceeded any water in excess of the capacity is estimated to be a loss attributed to that structure.
- The Soil Moisture option requires the variable efficiency option (see Section 3.5) be used.
- In a simulation mode, the Soil Moisture option uses an operating rule to specify an administration date that controls when water is available to be taken out of the soil zone to satisfy a consumptive (not total) demand. In order to represent water use when historic diversions are provided as a demand this operating rule allows water to be taken out of the soil zone when a structure's consumptive irrigation water requirement exists even if the user has specified the structures demand to be zero.
- In the baseflow mode, the Soil Moisture option takes water out of the soil zone to satisfy a consumptive (not total) demand after surface water and well water use occurs. In order to represent water use in baseflow mode, water can be taken out of the soil zone when a structure's consumptive irrigation water requirement exists even if the user has specified the structures diversion and pumping to be zero.

3.8 Wells

The StateMod model allows ground water pumping via wells to be modeled. The following are noted:

- Wells are operated within StateMod as water rights tied to a well structure that may or may not be tied to a diversion structure. Because a well is not connected to a stream except through return flows and depletions it does not need to be included in the network.
- If a well structure is not tied to a surface water structure then well demands are provided in the well demand file.
- If a well structure is tied to a surface water structure, then demands may be provided and treated in several ways as specified by the control variable *icondem.*
- Wells may increase the water supply available at the river at a given time step if well return flows exceed the stream depletion. StateMod checks for such a condition and reoperates to allow senior ditches to benefit from the additional water supply.
- Wells may require two or more delay patterns to represent the delay associated with return flows and depletions. The data for both types of delays are specified in the delay table input file. Note when the sum of return flows to the river is less than 100%, the balance is treated as a loss. Similarly when the sum of depletions to the river is less than 100%, the balance is treated as salvage.
- Wells may cause river flows to go negative when their estimated depletion to the river exceeds the streamflow. StateMod treats such an occurrence as an indication that pumping impacts have

depleted ground water storage rather than the stream flow. Under such a case, StateMod allows the pumping to occur and accounts for the source of water as originating from ground water storage. This water is presented in the diversion summary output under the column titled "From/To GW Stor" for each river node and for the whole basin in the water budget report (*.xwb). Note the quantity of water supplied by ground water storage in a simulation time period is taken out of the stream the next time period before any water allocation occurs. The control file variable *iwell* allows the repayment of this water to be limited to a maximum amount to represent stream / ground water systems that are disconnected. Also, since data for this term is generally not observed, baseflow calculations may be influenced by this lack of data.

- Well information is presented in four columns of the diversion summary report. The column titled "From Well" describes the total amount of water pumped and made available to a diversion. The column titled "Well Depletion" represents the impact of a previous months pumping on the river. The column titled "To/From GW Stor" was described above. The column titled "River by Well" represents the impact of the current months pumping on the river. The "Well Depletion" and "River by Well" data are separated because the impact of a previous months pumping on the river influences the water supply available to all users before any diversions occur while the impact of the current months pumping impacts water rights that are junior to the well only. Note by definition, a well structure that is not tied to a diversion has no data under the column "From Well". However, the columns titled "Well Depletion" and "River by Well" include the impact of all well pumping on the river.

3.9 Plans

StateMod includes a “Plan” structure type that allows an augmentation plan, terms and conditions associated with a water transfer or water reuse be simulated. Plan structures can also be used for certain types of unique administrative activities (e.g. out of priority diversions, accounting, administrative etc.). Twelve plan types are currently available:

1. Accounting Plan (e.g. Changed Water Rights)
2. Reservoir Reuse
3. Non Reservoir Reuse (e.g. WWTP)
4. Transmountain Import
5. Reservoir Reuse from Transmountain Import
6. Non Reservoir Reuse from Transmountain Import
7. Terms and Conditions
8. Well Augmentation
9. Recharge Plan
10. Out-of-Priority Diversion or Storage
11. Release Limit Plan (e.g. HUP Pool Release Limit)
12. Special Well Augmentation (e.g. Designated Basin, Coffin Wells, etc.)

The following are noted:

- Section 4.49 describes the physical data associated with a plan which includes its ID, name and location in the stream network.
- Water accounted for in various reuse plans be used as a source for many other operating rules (see Section 4.13).
- If a plan is not specified as a part of an operating rule or well water right, StateMod warns the user but assumes there are no terms and conditions to be imposed.

- Total demand and supplies associate with a “plan” are reported as part of the standard stream node output (*.xdd) under the plan ID and appropriate location in the network.
- Detailed reporting of a plan is provided in a standard plan output file (*.xpl).
- Accounting plans are currently implemented for storing pro-rata ownership of diversions or depletions via the direct flow exchange (type 24) and direct flow bypass (type 25) operating rules. Reusable supplies can be released from accounting plans and used to represent reusable water supplies in storage (Reuse Reservoir Plan) or at a WWTP (Non Reservoir ReUse Plan).
- Reservoir reuse plans are used to account for reusable water associated with an account in a reservoir. Reservoir reuse plans can be located anywhere in the network but are typically located adjacent to the associated reservoir. Reusable water supplies can be accounted for by assigning a reservoir reuse plan as part of an operating rule.
- Non-reservoir reuse plans are located on the stream network where the water is physically located.
- Transmountain import plans are located at the top of the tributary basin in which water is imported.
- Reservoir reuse plans from transmountain imports are located on the stream network where the reservoir is physically located. Reusable water supplies are accounted for in reservoir reuse plans are specified within the operating rule.
- Non reservoir reuse plans from transmountain imports are located on the stream network where the reservoir is physically located. Reusable water supplies are accounted for in reservoir reuse plans are specified within the operating rule.
- Terms and conditions (T&C) plans are located on the stream network at the most upstream location(s) where the terms and conditions of a water transfer are to be implemented (e.g. if a term and condition of a transfer requires a diversion leave historic return flows at the transfer location, then the plan should be located just downstream of the transfer location). Return flow obligations associated with a term and condition are a function of how much water gets transferred. Therefore when a terms and conditions (T&C) plan is specified, StateMod calculates the obligation on-the-fly for the month it occurs and all associated future months. Future return flow and/or depletion percentages and patterns may be specified to equal the same values as the source structure or the plan itself. The terms and conditions are defined within the operating rule.
- Well augmentation plans should be located on the stream network at the most upstream location(s) where the lagged pumping depletions affect the river. The lagged river depletions associated with operating a well water right out-of-priority represents the demands for a well augmentation plan. The timing pattern of depletions from pumping are included in the unit response table (monthly - *urm; daily - *.urd). Lagged river depletions associated with well pumping are a function of how much pumped water is simulated. When a well augmentation plan is specified, StateMod calculates the lagged river depletion on-the-fly the month it occurs and all associated future months. Operating rules can be used to satisfy this demand when a well is in priority or from other water supplies, including accretions from recharge diversions (Recharge Plan).
- Accretions associated with recharge water rights diverted from the river to recharge sites can be represented in Recharge Plans. Recharge plans are located on the stream network at the location(s) where the lagged river accretions associated with recharge diversions have been separately estimated to occur. The timing pattern of accretions from recharge diversions is included in the unit response table (monthly - *urm; daily - *.urd). Lagged river accretions associated with recharge diversions are a function of how much recharge diversion is simulated. When a recharge plan is specified, StateMod calculates the lagged river depletion on-the-fly the month it occurs and all associated future months. Operating rules can be used to supply the calculated accretions to meet other demands (e.g. well augmentation plan demands).

- Out-of-Priority plans are used to represent out-of-priority diversions to storage pursuant to the upstream storage statute (e.g. Blue River decree diversions by Denver and Colorado Springs). Accounting for replacement requirements associated with upstream storage statute operations are specified within the operating rule. Operating rules can be used to satisfy this demand when from other water supplies.
- Release limit plans are currently implemented for representing monthly and annual limits to reservoir releases (e.g. Green Mountain Reservoir HUP pool releases to Senate Document 80 beneficiaries).
- Special Well Augmentation Plans are used to represent lagged well depletions to the river system for wells that are considered not tributary to the river system (i.e. Coffin wells and designated basin wells). The timing pattern of depletions from pumping are included in the unit response table (monthly - *urm; daily - *.urd). Lagged depletions associated with well pumping are a function of how much pumped water is simulated. When a special well augmentation plan is specified, StateMod calculates the lagged depletion on-the-fly the month it occurs and all associated future months.

4.0 Input Description

This chapter describes the input files required to operate the StateMod Model. Sample data sets are provided in **Appendix A**. Some data file formats have been superseded over time while continuing to maintain the old format. For a description of the old format see Section **10.0 Discontinued but Supported File Formats.**

The following Sections are available in this chapter:

4.0 Remarks

Regardless of how the model is applied: Base Flow, Simulate, Report, or Data Check a monthly simulation requires no more than the first 29 files (less may be provided if wells are simulated). Files 30 - 33 are required only if specific detailed analysis such as the San Juan recovery program, variable efficiency and soil moisture accounting are requested. Files 34 is used by the Graphical User interface to present structure location data while file 35 allows the user to limit the volume of output to be provided. Files 36 - 42 are required for a daily simulation while files 43 - 46 are required if a daily baseflow estimated is to be performed.Files 47 – 53 are required for specific, relatively unique applications that include a downstream call, plans, and the Rio Grande Compact. Throughout this documentation a standard file naming convention has been used (e.g. Response file (*.rsp), Control file (*.ctl), etc. where * refers to a basin or scenario). This naming convention is recommended for scenario management but it is not required. Note, when the base streamflow file is generated outside the StateMod baseflow module or represents a file that has been saved for historical purposes, it is typically named *.rim. When the StateMod baseflow results are used for the simulation, the base streamflow file it is typically named *.xbm to ensure data passes from the baseflow module to the simulate module.

In general, the top of each data set contains a variable number of comment cards identified by a ”#" in column 1. Only the control (*.ctl) file and operational right (*.opr) files allow comments identified by a '#' below the header and within the data itself. Monthly time series data contain values for each month of the study period. Annual time series contain twelve values to be repeated for each year of the study period.

All structure names and ID’s are limited to 24 and 12 characters respectively. To allow free formatted input files there should be no blank characters in the name or ID or they should be in single or double quotes (e.g. instead of My Name use ‘My_Name’ or “My Name”).

Identifiers used throughout the model are limited to 12 characters. However if the standard numbering convention shown below is followed the ID should be limited to 8 characters since 4 of the 12 may be used to identify a well with up to 10 unique water rights (e.g. 12345678W.01). In general, any character may be used as an ID in StateMod although two reports; one related to the operational right file and one related to consumptive use by water district identifier look for specific characters in specific fields to simplify reporting. The Check option generates a report for operating rules which uses the operational right ID to the left of the decimal point to group operational rights from the same source together. Similarly, the consumptive use report (-xcu) from the Report option presents the diversions by water district by combining all structures that have the first two digits of their ID the same. The following convention is recommended to ensure the reports operate appropriately and that data for different river basins will have unique identifiers:

Item	**Source**	**Example**
Diversion ID	State WD*10000 + ID	570501
Reservoir ID	State WD*10000 + ID	573001
Well ID	State WD*10000 + ID + W	575001W
Instream Flow ID	State WD*10000 + ID	574501
Instream Flow terminus ID	State WD*10000 + ID	574501_Dwn
Water Right	Associated Structure ID plus .01, .02, etc.	570501.01
Operational Right ID	Source Structure * 10 + .01, .02, etc.	5705010.01
River node with a gage	USGS ID	09010400
Intermediate River Node	Upstream USGS ID + .01	09010400.01
Precipitation ID	NOAA ID	5025
Evaporation ID	NOAA ID	5025
Administration Number	State Engineer's Administration Number	16192.10378
Delay (Return Flow) Table ID	1, 2, 3, etc.	
Aggregated diversions	User WD_XXB###, where WD is the water district XX is the Aggregated type AD = diversion AR = reservoir AM = municipal AS = stock pond) B = basin (W=white, etc.) ### = counter	40ADW001

4.1 Response File (*.rsp)

The response file contains the names of all other data files required to run the model. This file is read by subroutine StateM. Note, that Version 10.30 and greater allows a user to enter response file data using one of two formats; random and sequential. StateMod reads the first file type and based on the occurrence of the character '=' in the first file name it determines if the file is random (contains a '=') or sequential (does not contain a '=').

The random file approach allows file names to be entered in any order as described below under Random Response Format. Any file type that is not required for a simulation is simply not included. Also any file name may be commented out by including a '#' character in column 1. Its format is described in the table below (Random Response Format). For a description of the sequential, old, format see the chapter titled 10.0 Discontinued but Supported File Formats.

Random File Format

File Descriptor	File Type	Standard Suffix
Control =	Control File	*.ctl
River_Network =	River Network File	*.rin
River_Gage =	River Gage File	*.rig
Reservoir_Station =	Reservoir Station	*.res
Diversion_Station =	Diversion Station	*.dds
StreamGage_Station =	Stream Gage Station	*.ris
Instreamflow_Station =	Instream Flow Station	*.ifs
Well_Station =	Well Station	*.wes
Instreamflow_Right =	Instream Flow Right	*.ifr
Reservoir_Right =	Reservoir Right	*.rer
Diversion_Right =	Diversion Right	*.ddr
Operational_Right =	Operational Right	*.opr
Well_Right =	Well Right	*.wer
Precipitation_Monthly =	Precipitation Monthly	*.pre
Precipitation_Annual =	Precipitation Annual	*.pra
Evaporation_Monthly =	Evaporation Monthly	*.evm
Evaporation_Annual =	Evaporation Annual	*.eva
Stream_Base Monthly =	Stream _Base Monthly	*.rim
Diversion_Demand_Monthly =	Diversion Demand Monthly	*.ddm
Diversion_Demand_AverageMonthly =	Diversion Demand Annual	*.dda
Diversion_DemandOverride_Monthly =	Diversion Override Monthly	*.ddo
Instreamflow_Demand_Monthly =	Instream Flow Demand Monthly	*.ifm
Instreamflow_Demand_AverageMonthly =	Instream Flow Demand_AverageMonthly	*.ifa
Well_Demand_Monthly =	Well Demand Monthly	*.wem
DelayTable_Monthly =	Delay Table Monthly	*.dly
Reservoir_Target_Monthly =	Reservoir Target Monthly	*.tar
Reservoir_Return =	Reservoir Seepage Return Data	*.rrf
IrrigationPractice_Yearly =	Irrigation Practice Yearly	*.ipy
ConsumptiveWaterRequirement_Monthly =	ConsumptiveWaterRequirement Monthly	*.iwr
SoilMoisture =	Soil Moisture	*.par
Reservoir_Historic_Monthly =	Reservoir Historic Monthly	*.eom
StreamEstimate_Coefficients =	Stream Estimate Coefficients	*.rib
StreamGage_Historic_Monthly =	Stream Gage Historic Monthly	*.rih
Diversion_Historic_Monthly=	Diversion Historic Monthly	*.ddh
Well_Historic_Monthly =	Well Historic Monthly	*.weh
OutputRequest =	Output Request	*.out
Stream_Base_Daily =	Stream Base Daily	*.ddd
Diversion_Demand_Daily =	Direct Flow Demand Daily	*.ddd
Instreamflow_Demand_Daily =	Instream Flow Demand Daily	*.ifd
Well_Demand_Daily =	Well Demand Daily	*.wed
Reservoir_Target_Daily =	Reservoir Target Daily	*.tad
DelayTable_Daily =	Delay Table Daily	*.dld
ConsumptiveWaterRequirement_Daily =	ConsumptiveWaterRequirement Daily	*.iwd
StreamGage_Historic_Daily =	StreamGage Historic Daily	*.riy
Diversion_Historic_Daily =	Diversion Historic Daily	*.ddy
Well_Historic_Daily =	Well Historic Daily	*.wey
Reservoir_Historic_Daily =	Reservoir Historic Daily	*.eoy
Downstream_Call =	Downstream Call	*.cal
StateCU_Structure =	StateCU Structure (AWC) file	*.str
RioGrande_Spill_Monthly =	Rio Grande Spill file	*.rgs

```
GeographicInformation =          Geographic Information (1)              *.gis
Network =                        Network File (1)                        *.net

Plan_Data =                      Plan Data                               *.pln
Plan_Wells =                     Plan Well Augmentation Data             *.plw
Plan_Return =                    Plan Return Data                        *.prf

Reach_Data =                     Reach Report Data                       *.rch

(1) The Geographic Information (*.gis) and Network (*.net) files are not used by
StateMod. However, if included, they allow the StateMod GUI to use them for
presentation.
```

4.2 Control File (*.ctl)

The control file contains information which controls the model simulation. To allow old StateMod data sets to operate without editing, the data after the year type (row 18-1) is assumed to be zero if not provided. An example is provided in Appendix A. Comments, indicated by a # in column 1, may be provided at any location in this file. This file is read by subroutine DATINP.

```
Row-data       Variable          Description
Title Data
1 thru 2                         Format (a80)
1-1            headin(i,1)       Title printed on output
2-1            headin(i,2)       Title printed on output

Study Period Data
3 through 32                     Format (i8 or f8.0)
3-1            iystr             Starting year of the simulation
4-1            iyend             Ending year of the simulation

General Control Switches
5-1            iresop            Switch for output units;
                                    1=cfs for all,
                                    2=acft for all,
                                    3=kaf for all,
                                    4=cfs for daily and acft for monthly
                                    5=cms for all
6-1            moneva            Switch for Evaporation and precipitation
                                    data; 0 = monthly; 1=average
7-1            iopflo            Switch for Streamflow; 1=total, 2=gains
8-1            numpre            Number of precipitation stations
9-1            numeva            Number of evaporation stations
10-1           interv               +n =Number of entries in each delay
                                    (return flow) pattern
                                    -1 =Variable number of entries per
                                          delay (return flow) pattern.
                                          return data is provided as a
                                          percent (e.g. 5.00)
                                    -100 =Variable number of entries per
                                          delay (return flow) pattern.
                                          return data is provided as a
                                          decimal (e.g. 0.05).

Factor Data
11-1           factor            Factor to convert from CFS to AF/DAY
                                    (1.9835)
12-1           rfacto            Divisor for streamflow data units;
                                    Enter 0 for data provided in CFS,
```

		Enter 1.9835 for data provided in AF/Mo
13-1	dfacto	Divisor for diversion data units; Enter 0 for data provided in CFS, Enter 1.9835 data provided in AF/Mo
14-1	ffacto	Divisor for in-stream flow data units; Enter 0 for data provided in CFS, Enter 1.9835 for data provided in AF/Mo
15-1	cfacto	Factor to convert reservoir content data to AF
16-1	efacto	Factor to convert evaporation data to feet/mo
17-1	pfacto	Factor to convert precip. data to feet/mo
18-1	cyr1	Year type Format (a5) (Right justified, all capital letters) CYR = Calendar Year (Jan - Dec) WYR = Water Year (Oct - Sep) IYR = Irrigation Year (Nov - Oct)

Advanced Control Switches

19-1	icondem	Switch for demand data type See Section 7.10 for a discussion of the Demand options. If simulating wells (iwell > 0 see below) 1 Historic Demand Approach demands for structures with both SW and GW rights are provided in a separate file (e.g. *.ddm & *.wem) and are not added (i.e. SW shortages cannot be supplied by GW & visa versa) 2 Historic Sum Demand Approach demands for structures with both SW & GW rights are provided separately (i.e. the *.ddm and *.wem files are added. Demands can be supplied by SW or GW) 3 Structure Demand Approach demands for structures with both SW and GW rights are provided in one file, the direct diversion demand file (e.g. *.ddm).Demands for well only lands are provided in the well demand file (*.wem) Demands can be supplied by SW or GW). 4 Supply Demand Approach Same as 3 but the surface water may be diverted up to their demand even if a CIR does not exist. See Section 7.10for a detailed discussion. 5 Decreed Demand Approach Same as 4 but the Decreed Demand Approach is used. See Section 7.10 for additional discussion.
20-1	ichk	Switch for detailed output 0 No detailed results 1 Print river network 4 Print detailed water right data plus misc. 5 Print detailed demand data 6 Print detailed daily data 7 Print detailed return flow data 8 Print detailed daily baseflow data to *.log

		file and daily baseflow results to the *.xtp file 9 Print detailed reoperation data 10 Echo operational right file read 11 Print reservoir evaporation details 14 Detailed water right data 20 Override daily ID for testing 21 Print top of binary file for *.xbn report 24 Print detailed results of opr. rule 23 downstream call 25 Limit daily baseflow output to the river ID specified in variable ccall (24-1) 30 Do not print daily binary results 90 Print detailed water use data from return 91 Print detailed demand data from Bomsec and well water right data from Welrig 92 Print detailed soil moisture data 94 Print ichk=4 plus call information -n Print allocation data at river node n 100+n Echo operational right file read and provide detailed output for an operational right type n for the operational right ID provided for variable ccall (24-1). Note ichk=131 provides details on an operational right type 31 201 Provide detailed output for an instream right ID provided for variable ccall (24-1) 202 Provide detailed output for a reservoir right ID provided for variable ccall (24-1) 203 Provide detailed output for a diversion right ID provided for variable ccall (24-1) 206 Provide detailed output for a well right ID provided for variable ccall (24-1)
21-1	ireopx	Switch for reoperation control See Section 7.17 for a discussion of the Reoperation control 0 Reoperate for reservoir releases and returns to non downstream returns (default) 1 Do not reoperate -n Reoperate when the sum of reservoir releases or downstream return flows exceed n in acft.
22-1	ireach	Switch for instream flow reach approach See Section 7.3 for a discussion of the Instream flow options. 0 No instream reach approach (Phase II) 1 Instream reach approach (Phase III) 2 Same as 0 plus monthly instream demands may be provided in the monthly may be provided in the monthly instream demand file (*.ifm) 3 Same as 1 plus monthly instream demands may be provided in the monthly instream demand file (*.ifm)
23-1	icall	Switch for detailed call data See Section 7.16 for a discussion of the Detailed call data 0 No detailed call data 1 Yes detailed call data
24-1	ccall	Detailed call water right ID (e.g. Section

		Section 4.6 field 1-1 variable (cidvri) See Section 7.16 for a discussion of the Detailed call data Note this variable is not used if the control variable icall = 0
25-1	iday	Switch for daily calculations See Section 7.6 for a discussion of the Daily capability 0 Monthly analysis 1 Daily analysis 2 Daily analysis where the daily demand is a monthly total that is decreased by the amount diverted each day (i.e. "daily-decrementing" approach).
26-1	iwell	Switch for well operations See Section 7.4 for a discussion of the well options. 0 No well analysis -1 No well analysis but the file names are included in the response file (*.rsp) 1 Well analysis with no max recharge 2 Well analysis with a constant max recharge assigned as variable gwmaxrc in the control file (*.ctl) 3 Well analysis with a variable max recharge assigned as variable gwmaxrc (1-4) of the river network file (*.rin)
27-1	gwmaxrc(1)	Maximum recharge limit (cfs) See Section 7.4 for a description of the well options and this variable +n Constant maximum recharge limit (cfs). Only used when variable iwell of the control file (*.ctl) is set to 2.
28-1	isjrip	Switch for an annual San Juan Recovery Program (SJRIP) Sediment file See Section 7.18 for a description of the SJRIP 0 No SJRIP (*.sjr) file provided -1 SJRIP file provided in the response (*.rsp)file but not used 1 SJRIP file provided
29-1	itsfile	Switch for an annual irrigation practice file See Section 7.11 for a discussion of Variable efficiency and use of the annual CU time series data 0 No time series file provided -1 Time series file provided in the response (*.rsp)file but not used 1 Use Annual GW area limit only 2 Use Annual Well Capacity only 10 Use all data provided in *.ipy file. This includes annual GW area, well capacity, area served by ground water, area served by sprinklers, max Flood efficiency, max sprinkler efficiency, and total area
30-1	ieffmax	Switch for annul consumptive water requirement (*.iwr or *.ddc) file See Section 7.11 for a discussion of

		Variable efficiency and use of the annual CU time series data 0 No IWR file provided -1 IWR (*.iwr) file provided in the response (*.rsp)file but not used 1 IWR file provided and variable efficiency used. (requires itsfile from above be > 0) 2 IWR file provided and printed to output but variable efficiency is not used except to limit reservoir releases to days when an IWR exists when iday = 2
31-1	isprink	Switch for sprinkler data (area and efficiency) use See Section 7.12 for a description of the sprinkler options 0 No sprinkler data used 1 For baseflow or simulation mode Use sprinkler area, sprinkler efficiency and gwmode data provided in time series file (*.ipy)
32-1	soild	Switch for soil moisture accounting See Section 7.13 for a Description of the Soil Moisture capability 0 No Soil Moisture (*.par) file provided -1 Soil Moisture (*.par) file provided in the response (*.rsp) file but not used +n Soil Moisture (*.par) used where +n is a typical soil zone depth (ft) (e.g. 2.5 - 3.0 ft). Note StateMod sets the initial soil moisture storage to 50% of the soil capacity (see Section 7.13)
33-1	isig	Switch for significant figures behind decimal point in output files 0 No significant figures 1 One significant figure 2 Two significant figures

4.3 River Network File (*.rin)

The river network file is used to describe the river basin of interest. Note, the last downstream node should be blank. An example is provided in Appendix A. This file is read by subroutine DATINP

```
Row-data       Variable           Description

1                                 Format (a12, a24, a12, 1x, a12, 1x, f8.0)
1-1            cstaid(1)          River node ID
1-2            stanam(i,1)        Station name
1-3            cstadn(1)          Downstream node
                                  Note leave blank for the end of the network
                                     or for a tributary with a futile call
1-4            comment(1)         Comment reserved for structure at
                                     this location
1-5            gwmaxr(1)          Variable maximum recharge limit (cfs).

               Only used when variable iwell of the
                                     control file (*.ctl) is set to 3.

                                  Repeat for the number of river nodes
```

4.4 River Station File (*.ris)

The river station file is used to describe the name and location of nodes where baseflows are known. Baseflows typically consist of streamflow gages (which have a historical time series in the historical stream flow file (*.rih)) and other nodes which have a base flow estimated using information in the base flow data file (*.rib). The number and order of entries corresponds to the Stream flow file. An example is provided in Appendix A. This file is read by subroutine DATINP.

```
Row-data       Variable           Description

Station Data
1                                 Format (a12, a24, a12, 1x, a12)
1-1            crunid(1)          Stream station ID
1-2            runnam(i,1)        Station name
1-3            cgoto(1)           River node with a stream gage
1-4            crunidy(1)         Daily Stream station ID (for daily model only)
                                  See Section 7.6 for a detailed discussion

                                  Enter Stream station ID (crunid) if daily data
                                  Will be provided for this station
                                     Monthly data controls
                                     Enter another stream station ID to use the
                                     daily distribution of another but weight
                                     values by the monthly total in *.rim file
                                  Enter 0 to use the average daily value from
                                     the monthly total in the *.rim file
                                     Monthly data controls
                                  Enter 3 to use the daily value provided in
                                     the daily river (*.rid) file
                                     Daily data controls
                                  Enter 4 to use a daily pattern developed by
                                     connecting the midpoints of monthly data
                                     Monthly data controls

                                  Repeat for the number of stream gages
```

4.4.1 River Gage File (*.rig)

The river gage file is used to describe the name and location of nodes where gaged streamflows are located. Gaged streamflows have a historical time series in the historical stream flow file (*.rih). This file is part of a future enhancement that clearly separates data in the river station file (*.ris) into gaged and non gaged flow locations. Currently this file is used by the daily baseflow module only. This file is read by subroutine VIRIN.

```
Row-data        Variable          Description

Station Data
1                                 Format (a12, a24, a12, 1x, a12)
1-1             crunid(1)         Stream Gage station ID
1-2             runnam(i,1)       Station name
1-3             cgoto(1)          River node with a stream gage
1-4             crunidy(1)        Daily Stream station ID (for daily model only)
                                  See Section 7.6 for a detailed discussion

                                  Enter Stream station ID (crunid) if daily data
                                     Will be provided for this station
                                     Monthly data controls
                                  Enter another stream station ID to use the
                                     daily distribution of another but weight
                                     values by the monthly total in *.rim file
                                     Monthly data controls
                                  Enter 0 to use the average daily value from
                                     the monthly total in the *.rim file
                                     Monthly data controls
                                  Enter 3 to use the daily value provided in
                                     the daily river (*.rid) file
                                     Daily data controls
                                  Enter 4 to use a daily pattern developed by
                                     connecting the midpoints of monthly data
                                     Monthly data controls
                                  Enter Stream station ID (crunid) if daily data
                                     will be provided for this station
                                     Monthly data controls
                                  Enter another stream station ID to use the
                                     daily distribution of another but weight
                                     values by the monthly total in *.rim file
                                     Monthly data controls
                                  Enter 0 to use the average daily value from
                                     the monthly total in the *.rim file
                                     Monthly data controls
                                  Enter 3 to use the daily value provided in
                                     the daily river (*.rid) file
                                     Daily data controls
                                  Enter 4 use a daily pattern developed by
                                     Connecting the midpoints of monthly data
                                     Monthly data controls

                                  Repeat for the number of stream gages
```

4.5 Direct Diversion Station File (*.dds)

The direct diversion station file contains information to describe the physical properties of each direct diversion in the system. An example is provided in Appendix A. This file is read by subroutine DATINP. The following are noted:

- The average efficiency data provided with this file (divefc) is not used when the maximum efficiency approach is operated (see control file variable ieffmax) unless the structure type (irturn, below) is a carrier.

```
Row-data        Variable            Description

Station Data
1                                   Format (a12, a24, a12, i8, f8.2, 2i8, 1x, a12)
1-1             cdivid(1)           Diversionstation ID
1-2             divnam(i,1)         Diversion name
1-3             cgoto               River node where diversion is located
1-4             idivsw(1)           Switch; 0=off, 1=on
1-5             divcap(1)           Diversion capacity (CFS)
1-6             dumx                Not currently used
1-7             ireptyp(1)          If a general replacement reservoir option
                                    (type 10) is used.
                                    0 Do not provide general replacement reservoir
                                       benefits
                                    1 Provide 100% replacement
                                    -1 Provide depletion replacement
1-8             cdividy(1)          Daily Diversion ID (not used for monthly model)
                                    See Section 7.6 for a detailed discussion
                                    Enter station ID (cdivid) if daily data
                                       will be provided for this station
                                       Monthly data generally controls
                                    Enter another station ID to use the daily
                                       distribution of another but weight values
                                       by the monthly total in *.ddm file
                                       Monthly data generally controls
                                    Enter 0 to use the average daily value from
                                       the monthly data in the *.ddm file
                                       Monthly data controls
                                    Enter 3 to use the daily value from
                                       the daily demand (*.ddd) file
                                       Daily data controls
                                    Enter 4 use a daily pattern developed by
                                       connecting the midpoints of monthly data
                                       Monthly data controls

Diversion Switches
2                                   Format(12x, a24, 12x, 2i8, f8.2, f8.0, i8)
2-1             usernam(1)          User name
2-2             idvcom(1)           Data type switch
                                       1 monthly total demand provided
                                        (Section 4.17),
                                       2 annual total demand provided
                                        (Section 4.18),
                                       3 monthly irrigation water requirement
                                       provided (Section 4.17)
                                       4 annual irrigation water requirement
                                       provided (Section 4.17)
                                       5 estimate to be zero
2-3             nrtn(1)             Number of return flow locations or table
```

		references
2-4	divefc(1)	System efficiency switch. Enter 0-100 % for a constant value each month. Enter a negative value to provide 12 values, one for each month. Note this data is not used when the maximum efficiency approach is used (see control file variable ieffmax) unless The structure type (irturn, below) is a carrier
2-5	area(1)	Enter 0; Irrigated acreage (ac) for future Use
2-6	irturn(1)	Use type; 0 = Storage 1 = Irrigation 2 = Municipal 3 = Carrier 4 = Transmountain 5 = Other
2-7	demsrc(1)	Demand source code (used for documentation purposes and non StateMod applications to determine if a structure supplies an irrigation demand.) 1 = Irrigated acreage from GIS database 2 = Irrigated acreage from structure file (tia) 3 = Irrigated acreage from GIS database, the primary component of lands served by multiple structures 4 = Same as 3 but data is from the structure file (tia) 5 = Secondary component of lands served by multiple structures 6 = Municipal, industrial or transmountain structure (no acreage data expected) 7 = Carrier structure (no acreage data expected) 8 = Acreage data provided by the user -999 = Acreage data unknown
Monthly Efficiency Data		
3		Free Format (Include if divefc above is < 0)
3-1	diveff(1,12)	Efficiency % by month for the year type selected (water year, irrigation year, calendar year)
Return Flow Data		
4		Format (36x, a12, f8.2, i8)
4-1	crtnid(1)	River node receiving return flow
4-2	pcttot(1)	Percent of return flow to this river node
4-3	irtndl(1)	Delay (return flow) table for this return flow
		Repeat for number of returns (nrtn)
		Repeat for number of diversions

4.6 Direct Diversion Rights File (*.ddr)

The direct diversion rights file contains data associated with a diversion right. An example is provided in Appendix A. This file is read by subroutine RIGINP.

```
Row-data       Variable          Description

Right Data
1                                Format (a12, a24,a12,4x, f12.0,f8.2,i8)
1-1            cidvri(1)         Diversion right ID
1-2            named(1)          Diversion right name
1-3            cgoto             Direct diversion structure ID associated
                                    with this right
1-4            irtem(1)          Administration number
1-5            dcrdiv(1)         Decreed amount(CFS)
1-6            idvrsw(1)         Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
                                    -n Stop after year n

                                 Repeat for the number of diversion rights
```

4.7 Instream Flow Station File (*.ifs)

The instream flow station file contains information to describe the physical properties of each instream flow in the system. An example is provided in Appendix A. This file is read by subroutine DATINP.

```
Row-data       Variable          Description

Station Data
1                                Format (a12, a24, a12, 1x, a12,1x,a12,i8)
1-1            cifrid(1)         Instream flow station ID
1-2            xfrnam1(i,1)      Instream flow station name
1-3            cgoto(1)          Upstream river node where the instream flow
                                   point or reach is located
1-4            ifrrsw(1)         Switch; 0=off, 1=on
1-5            crtnid            Downstream river node where the instream flow
                                   point or reach is located.  For an instream
                                   point enter cgoto(1) or leave blank
1-6            cifrridy(1)       Daily Instream station ID (for daily model only)
                                 See Section 7.6 for a detailed discussion

                                 Enter Instream station ID (crunid) if daily data
                                   Will be provided for this station
                                   Monthly data controls
                                 Enter another instream station ID to use the
                                    daily distribution of another but weight
                                    values by the monthly total in *.rim file
                                 Enter 0 to use the average daily value from
                                    the monthly data in the *.ifm file
                                    Monthly data controls
                                 Enter 3 to use the daily value from
                                    the daily demand (*.ifd) file
                                    Daily data controls
                                 Enter 4 use a daily pattern developed by
                                    connecting the midpoints of monthly data
                                    Monthly data controls
1-7            iifcom(1)         Data type switch
```

```
                                1 monthly total demand provided
                                 (Section 4.17),
                                2 annual total demand provided
                                 (Section 4.18),
```

Repeat for the number of instream flow stations

4.8 Instream Flow Right File (*.ifr)

The instream flow right file contains data associated with an instream flow's water rights. An example is provided in Appendix A. This file is read by subroutine RIGINP.

```
Row-data       Variable          Description

Right Data
1                                Format (a12, a24,a12, 4x, f12.0, f8.2, i8)
1-1            cifrri            Instream Flow right ID
1-2            namei(1)          Instream Flow right name
1-3            cgoto             Instream structure ID associated with this
                                 right
1-3            irtem(1)          Administration number
1-4            dcrifr(1)         Decreed amount(CFS)
1-5            iifrsw(1)         Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
                                    -n Stop after year n

                                 Repeat for the number of instream flow rights
```

4.9 Well Station File (*.wes)

The well station file contains information to describe the physical properties of each well structure in the system. An example is provided in Appendix A. This file is read by subroutine DATINP.

```
Row-data       Variable          Description

Station Data
1                             Format (a12, a24, a12, i8, f8.2, 1x, a12, 1x, f12.5)
1-1            cdividw(1)        Well Station ID
1-2            divnamw(1)        Well Station name
1-3            idvstaw(1)        River node where the well is located
1-4            idivsww(1)        Switch; 0=off, 1=on
1-5            divcapw(1)        Well capacity (cfs)
1-6            cdividyw(1)       Daily Well Station ID (not used for monthly
                                    model) See Section 7.6 for a detailed discussion

                                 Enter station ID (cdividw) if daily data
                                    will be provided for this station
                                    Monthly data controls
                                 Enter another station ID to use the daily
                                    distribution of another but weight values
                                    by the monthly total in *.wem
                                    Monthly data controls
                                 Enter 0 to use the average daily value from
                                    the monthly data in the *.wem file
                                    Monthly data controls
```

		Enter 3 to use the daily value from the daily well demand (*.wed) file Daily data controls Enter 4 use a daily pattern developed by connecting the midpoints of monthly data Monthly data controls
1-7	primary(1)	Switch; 0=off Water right priorities determine when water is diverted.This option is commonly called SW primary because SW is typically senior +n=on Well water rights will be adjusted by n. This option is called GW primary because it allows priority of GW rights to be made senior to SW rights when an appropriate value of n is provided (e.g. 15000).Note StateMod operates appropriately if n makes a ground water right negative
Well Switches		
2		Format(36x, a12, 3i8, f8.2, f8.0, i8, f8.0)
2-1	idvcow2(1)	Diversion this well structure is associated with. Enter NA if this well is not associated with a diversion structure
2-2	idvcomw(1)	Data type switch 1 monthly total demand provided (Section 4.22) 2 Not active. Reserved for annual total demand 3 monthly irrigation water requirement provided(Section 4.21) 4 Not active. Reserved for annual irrigation water requirement 5 estimate to be zero 6 this well station is tied to a direct diversion station and expects demand data provided as a total in file *.ddm (e.g. no well demand data is expected)
2-3	nrtnw(1)	Number of return flow locations or table references
2-4	nrtnw2(1)	Number of depletion locations or table References
2-5	divefcw(1)	System efficiency Enter 0-100% for a constant value each month. Enter a negative value to provide 12 values, one for each month
2-6	areaw(1)	Irrigated acreage (ac) for future n = Irrigated acreage for this structure -1 = Irrigated acreage provided in the direct diversion station file (*.dds).Use when a structure has both SW and GW supplies
2-7	irturnw(1)	Use type; 1 = irrigation 2 = municipal 3 = commercial 4 = transmountain 5 = other (e.g. augmentation or recharge wells)

```
2-8            demsrcw(1)       Demand source code (used for documentation
                                   purposes and non StateMod applications to
                                   determine if a structure supplies an
                                   irrigation demand)
                                   1 = Irrigated acreage from GIS database
                                   2 = Irrigated acreage from structure
                                      file (tia)
                                   3 = Irrigated acreage from GIS database,
                                      the primary component of lands served
                                      by multiple structures
                                   4 = Same as 3 but data is from the
                                      structure file (tia)
                                   5 = Secondary component of lands served
                                      by multiple structures
                                   6 = Municipal, industrial or transmountain
                                      structure (no acreage data expected)
                                   7 = Carrier structure (no acreage data
                                      expected)
                                   8 = Acreage data provided by the user
                                -999 = Acreage data unknown

Monthly Efficiency Data
3                               Free Format (Include if divefc above is < 0)
3-1            diveffw(1,12)    Efficiency % by month for the year type
                                   selected (water year, irrigation year,
                                   calendar year)

Return Flow Data
4                               Format (36x, a12, f8.2, i8)
4-1            crtnidw(1)       River node receiving return flow
4-2            pcttotw(1)       Percent of return flow to this river node
4-3            irtndlw(1)       Delay (return flow) table for this return
                                   flow

                                Repeat for number of return locations (nrtnw)

Depletion Data
5                               Format (36x, a12, f8.2, i8)
5-1            crtnidw2(1)      River node receiving depletion
5-2            pcttotw2(1)      Percent of depletion to this river node
5-3            irtndlw2(1)      Delay (depletion) table for this return
                                   flow

                                Repeat for number of depletion locations(nrtnw2)

                                Repeat for number of wells
```

4.10 Well Right File (*.wer)

The well right file contains data associated with a well structures. An example is provided in Appendix A. This file is read by subroutine RIGINP.

```
Row-data       Variable         Description

Right Data
1                               Format (a12, a24,a12, 4x, f12.0, f8.2, i8)
1-1            cidvri(1)        Well right ID
1-2            cnamed(1)        Well right name
1-3            cgoto            Well structure ID associated with this
                                   right
1-3            irtem(1)         Administration number
```

```
1-4            dcrdivw(1)        Decreed amount(CFS)
1-5            idvrsww(1)        Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
                                    -n Stop after year n

                                 Repeat for the number of well rights
```

4.11 Reservoir Station File (*.res)

The reservoir station file contains information to describe the physical properties of each reservoir in the system. Reservoirs may be operated such that they will not (iressw = 1 or 2) or will (iressw = 3) divert above their target. When a reservoir stores above its target and subsequently releases that water as part of an operating rule, the net result is a paper fill which is charged against the reservoir right's one fill limitation and additional water becomes available downstream of the reservoir. An example reservoir station file is provided in Appendix A. This file is read by subroutine GETRES.Row-data

Variable Description

```
Station Data
1                                Format (a12, a24, a12, i8,f8.0, 1x, a12)
1-1            cresid(1)         Reservoirstation ID
1-2            resnam(i,1)       Reservoir name
1-3            cgoto             River node where reservoir is located
1-4            iressw(1)         Switch for reservoir;
                                 0 off,
                                 1 on, Do not adjust for dead storage
                                    Do not store above reservoir targets
                                 2 on, Do not store above reservoir targets
                                    Adjust maximum ownership and initial
                                    storage of the last account by the
                                    dead storage volume
                                 3 on, Do not adjust for dead storage
                                    Do not store above reservoir target
                                    Charge ability to store above a
                                    reservoir target to the decree
                                    (e.g. paper fill)
1-5            rdate(1)          Date for one fill rule administration
                                 +n month for reoperation at the beginning
                                 of the month (e.g. 1 = January 1,
                                 2 = February 1, etc.)
                                 -1 to do not administer the one fill rule.
1-6            cresidy(1)        Daily reservoir ID (not used for monthly model)
                                 See Section 7.6 for a detailed discussion

                                 Enter station ID (cresid) if daily data
                                 will be provided for this station
                                 Monthly data controls
                                 Enter another station ID to use the daily
                                 distribution of another but weight values
                                 by the monthly total in the reservoir
                                 target (*.tar) file or reservoir end-
                                 of-month (*.eom) file
                                 Monthly data controls
                                 Enter 0 to use the average daily value from
                                 the monthly data in the reservoir
                                 target (*.tar) file or reservoir end-
```

```
                              of-month (*.eom) file
                              Monthly data controls
                              Enter 3 to use the daily value from
                              the daily reservoir target (*.tad) file
                              or reservoir end-of-day (*.eod) file
                              Daily data controls
                              Enter 4 use a daily pattern developed by
                              Connecting the midpoints of monthly data
                              Monthly data controls
                              Enter 5 to use a daily pattern developed by
                              connecting the end points of monthly data

Physical Data
Row 2                         Format (24x, 4f8.0, 4i8)
2-1          volmin(1)        Minimum reservoir content (AF)
2-2          volmax(1)        Maximum reservoir content (AF)
2-3          flomax(1)        Maximum flow downstream of the
                              reservoir (e.g. current stream flow
                              plus the reservoir release (CFS)
2-4          deadst(1)        Dead storage in reservoir (AF)
2-5          nowner(1)        Number of owners
2-6          nevapo(1)        Number of evaporation stations for this reservoir
2-7          nprecp(1)        Number of precipitation stations for this reservoir
2-8          nrange(1)        Number of area capacity values

Owner Data
Row 3                         Format (12x, a12, 3f8.0, i8)
3-1          ownnam(1)        Owner name
3-2          ownmax(1)        Maximum storage of owner 1
3-3          curown(1)        Initial storage of owner 1
3-4          pcteva(1)        Switch for evaporation distribution
                                 0 Prorate reservoir evaporation
                                   between all accounts proportionally
                                   based on their current storage volume
                                   n Apply n (%) to this account
                                -1 No evaporation to this account
3-5          n2own(1)         Ownership date used for one fill calculations
                                 1 Ownership is tied to a first fill
                                   right(s),
                                 2 Ownership is tied to a second fill
                                   right(s)

                              Repeat for the number of owners (nowner)
Evaporation Data
Row 4                         Format (24x,f8.2)
4-1          cevar(1)         Evaporation station ID for this reservoir
4-2          weigev(1)        Percent of this station to use

                              Repeat for the number of evap stations
                                 (nevapo)

Precipitation Data
Row 5                         Format (24x,,f8.2)
5-1          cprer(1)         Precipitation station ID
5-2          weigpr(1)        Percent of this station to use

                              Repeat for the number of precipitation stations (nprecp)

Area Capacity Data
Row 6                         Format (24x,3f8.0)
6-1          conten(i,1)      Content in area capacity table for point 1 (AF)
6-2          surarea(i,1)     Area associated with the content for point 1 (ac)
```

```
6-3             seepage(irg,1)     Seepage associated with the content for
                                      point 1 (AF per month)

                                   Repeat above for nrange(1) values

                                   Repeat rows 1-8 for the number of reservoirs
```

4.12 Reservoir Right File (*.rer)

The reservoir rights file contains data associated with a reservoir's water rights. An example is provided in Appendix A. This file is read by subroutine RIGINP.

```
Row-data        Variable           Description

Right Data
                                   Format (a12,a24,a12,4x,f12.0,f8.0,4i8,a12)
1-1             cirsid(1)          Reservoir right ID
1-2             namer(1)           Reservoir right name
1-3             cgoto              Reservoir station ID associated with this right
1-3             rtem(1)            Administration number
1-4             dcrres(1)          Decreed amount (AF)
1-5             irsrsw(1)          Switch
                                      0=off
                                      1=on
                                      +n Begin in year n
                                      -n Stop after year n
1-7             iresco(2,1)        Switch for account distribution
                                      +n Account to be served by this right
                                      0 Fill all accounts based on their
                                         ratio of their ownership ration
                                      -n Fill the first n accounts based on
                                         the ratio of their ownership
1-8             ityrsr(1)          Reservoir right type;
                                      1 Standard
                                      -1 Out Of Priority water right
1-9             n2fill(1)          Reservoir right type
                                      1 First fill,
                                      2 Second fill
1-10            copid(1)           Associated Out-of-priority operational right
                                      (include only for Out Of Priority water rights
                                      (ityrsr = -1)

                                   Repeat for the number of reservoir rights
```

4.13 Operational Right File (*.opr)

The operational file describes unique operating criteria within the basin. Use of the terms ‘operational rights’ and ‘operating rules’ are used interchangeably herein. The StateMod Model contains the following standard operational rights. This file is read by subroutine OPRINP. Comments, indicated by a # in column 1 may be provided at any location in this file. Because the data associated with this file varies based on the type of operational right selected the input description is repeated for each application.

Beginning with version 12.0 an operating rule file format was adopted that includes six (6) additional variables associated with water reuse, diversion type, etc. For a description of the old (*.par file) format, which StateMod still supports, see the chapter titled **10.0 Discontinued but Supported File Formats.**

Because multiple input file formats may be provided it is recommended the following string be provided near the top of the file before any data: #FileFormatVersion 2. If the format version indicator is not provided StateMod will try to read the file and try to determine the appropriate file type.

The following are noted:

- StateMod operating rules represent water being diverted or transferred from a Source to a Destination with a particular Delivery Method. Identification of these elements is necessary to select the appropriate operating rule for each situation.

- Sources can be the River (for direct flow and storage rights – see Sections 4.6 and 4.12), Ground Water (for well rights – see Section 4.10), a Reservoir (see Section 4.11) or a Plan structure (see Section 3.9).

- Destinations can be diversion structures, reservoirs, instream flows, or plan structures.

- StateMod operating rules deliver water to meet demands via the river or through a carrier. Water delivered by the river is self explanatory. For example a reservoir release to the river that is later diverted or exchanged from the river by ditch. StateMod considers the delivery method to be a carrier when water is delivered from one structure by another structure without being released to the river. For example the delivery from an off-channel reservoir to an irrigation demand directly located below the reservoir. All carriers such as canals, ditches, laterals, pipelines, tunnels, etc are treated as diversion structures.

Delivery Method Relative to the Source

#	Delivery Method	Description
1	River	Release to the river then divert directly or by exchange
2	Carrier	Release to a carrier. Water is transported to a user by a canal, it is not released to the stream system.
3	Bookover	Transfer from one reservoir account to another account or another reservoir (water is not physically moved)
4	Alternate_Point	Divert at a different location than the water right
5	Out_Of_Priority	Out of Priority

- A total of 11 generic operating rule types were originally sufficient for development of all of the western slope planning models. Development of the Rio Grande planning model required eight new rule types. One more rule type was added to support revisions to the San Juan model.

Two more rule types were added when representation of the Blue River decree operations was added to the Colorado model. Recently, in preparation for the South Platte planning model, 27 new rule types have been added to the StateMod executable, bringing the total to 49 operating rule types.

- The original 11 operating rule types typically addressed a single Source, multiple Destination types, and a single Delivery Method. Pursuant to the continuing development of the model there is some redundancy with the original operating rule types and a subsequent one that provides the same functionality but has more flexibility. For example the Carrier without Loss rule (type 11) can be replaced with the Carrier with Loss rule (type 45) by simply setting the carrier loss to zero. The documentation herein includes descriptions of all 49 operating rules in order to be backward compatible and because the original 11 rules are generally simpler to apply.

- Examples of the operating rules are provided in a sample operating rule file.

- Descriptions of each operating rule and their associated input variables, are included in Sections 4.13.1 to 4.13.49.

Figures 1 through 4 are flow charts developed to assist a user to select the appropriate operating rule. Figures 1-3 provide information when the source of water is a Reservoir, Direct Flow Right or a Plan Structure, respectively. Figure 4 provides information for special rules that have been developed for unique circumstances (e.g. Rio Grande compact, South Platte River compact, Augmentation Wells, etc.). These figures can be used by 1. Selecting the appropriate figure based on the source of water, and 2. Selecting the appropriate sub set (Delivery Method, Ownership, Plan Type, Special Rule) that meets a user's needs. Following are five (5) examples of how to use these figures to select the appropriate operating rule:

- Example 1 **-** Release water from a reservoir (Source) to a direct diversion (Destination) by river exchange (Delivery Method)
  - On Figure 1 (Source – Reservoir), follow the arrow titled "Delivery via the River by Exchange". Continue down that arrow to the arrow titled Destination "Diversion", resulting in use of type 4 operating rule (see Section 4.13.4).

- Example 2 - Diversion of an entire (100%) direct flow right (Source) to an off-channel reservoir (Destination) through a carrier structure (Delivery Method) with or without loss.
  - On Figure 2 (Source - Direct Flow Right) , follow the arrow titled "Total (100 percent) Amount of Right" to Destination "Carrier to a Diversion or Reservoir", resulting in use of type 11 operating rule (see Section 4.13.11). If carrier losses associated with diversions to storage are to be representedthe Destination "Carrier to Reservoir with Loss" would result in use of a Type 45 operating rule (see Section 4.13.45).

- Example 3 - Release reusable water stored in a Plan (Source) and Reservoir to meet Terms & Conditions on a neighboring tributary (Destination) via a river exchange (Delivery Method)
  - On Figure 3 (Source – Plan Structure) follow the arrow titled "From Reservoir Reuse Plan" to Destination "Terms & Conditions Plan Delivery by Exchange", resulting in use of type 49 operating rule (explained further below in Section 4.13.49).

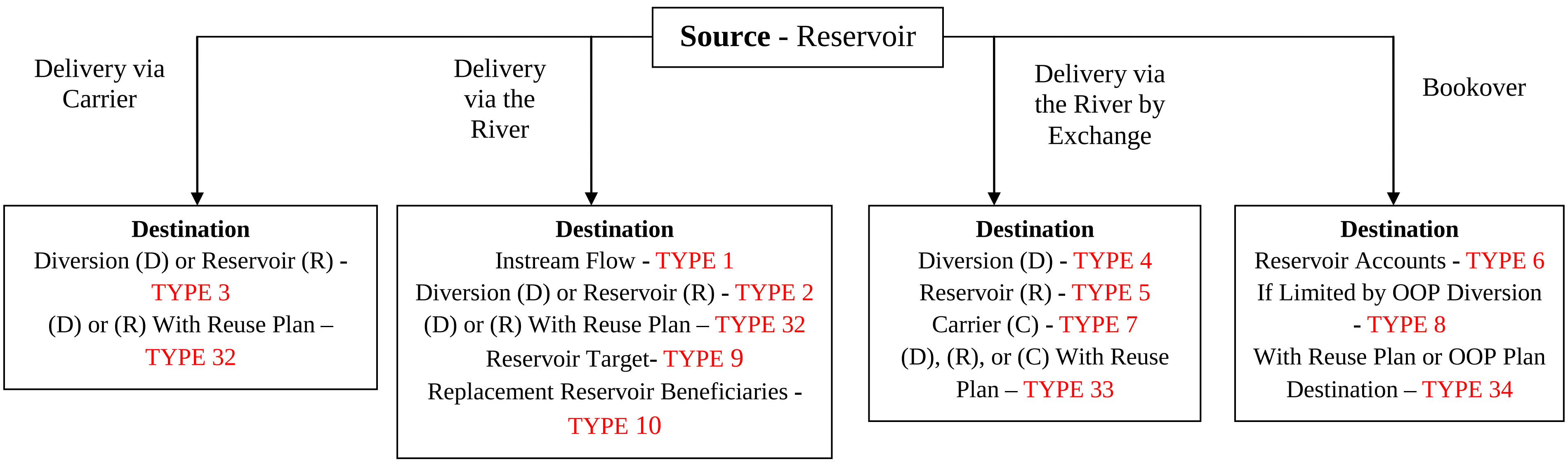
- Example 4 - Represent the South Platte Compact

- On Figure 4 (Special Operating Rules) select the box titled “Interstate Compacts” to Destination “South Platte Compact”, resulting in use of type 40 operating rule (see Section 4.13.40);

- Example 5 - Operate an Augmentation Well
  - On Figure 4 (Special Operating Rules) select the box titled “Source – Ground Water”to Augmentation Well, resulting in use of type 37 operating rule (explained further below in Section 4.13.49).

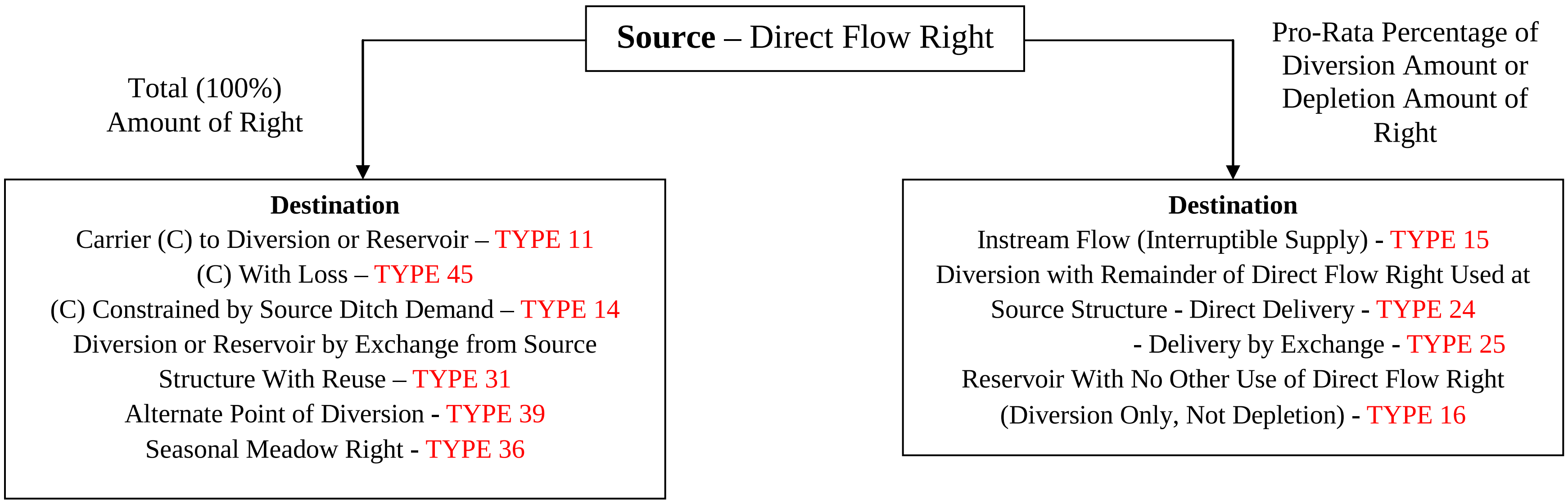
STATEMOD OPERATING RULES DECISION TREE

Operating Rule Types Based on Source and Destination Structures



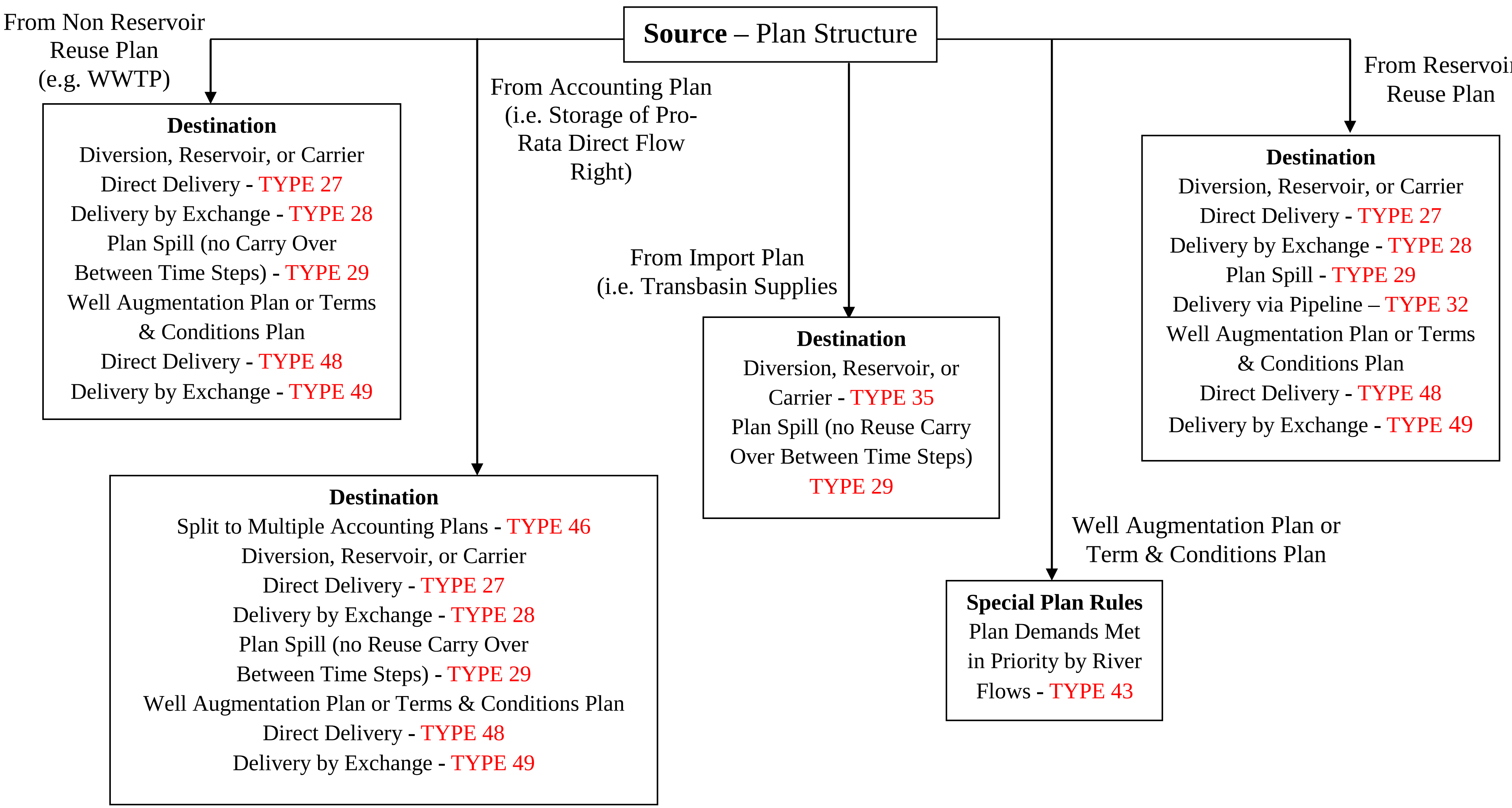
STATEMOD OPERATING RULES DECISION TREE

Operating Rule Types Based on Source and Destination Structures



STATEMOD OPERATING RULES DECISION TREE

Operating Rule Types Based on Source and Destination Structures



STATEMOD OPERATING RULES DECISION TREE

Special Operating Rule Types

Interstate Compacts

La Plata Compact (Index Flow) - TYPE 13
Rio Grande Compact Deliveries - TYPE 17
Conejos River Compact Deliveries - TYPE 18
South Platte Compact - TYPE 40
Navajo Reservoir Release for San Juan RIPRAP - TYPE 20

Soil Moisture

Soil Moisture Use Senior to Surface and/or Ground Water Right – TYPE 22

Other

Reoperation (Increase Speed of Simulation) - TYPE 12
Downstream Call Function (Used for Modeling a Portion of a River System) - TYPE 23

Storage Operations

San Juan RIPRAP Releases - TYPE 20
OOP Diversion (Upstream Storage Statute) - TYPE 38
operated with OOP Bookover – TYPE 8
Storage with Special Limits (e.g., Green Mountain 1955 Exchange Limited by Dillon and Colorado Springs OOP Diversion and Storage Plan) – TYPE 41
Administrative Plan Limit (HUP Releases, Colorado Springs Operations) – TYPE 47
Plan Reset – TYPE 42

Source – Ground Water

Augmentation Well - TYPE 37
Recharge Well – TYPE 44

Item	Destination or Diverting Structure	Source or Replacement Structure	Operational Activity
4.13.1	Instream Flow	Reservoir	Reservoir to Instream Flow Delivery by the River
4.13.2	Direct Flow or Reservoir	Reservoir	Reservoir to a Direct Flow or reservoir or carrier Delivery by the river or carrier
4.13.3	Direct Flow or Reservoir	Reservoir	Reservoir to a Carrier Delivery by a carrier
4.13.4	Direct Flow	Reservoir	Reservoir Exchange to a Direct Flow Delivery by the river
4.13.5	Reservoir	Reservoir	Reservoir Exchange to Storage Delivery by the river
4.13.6	Reservoir	Reservoir	Paper exchange between reservoir accounts (bookover)
4.13.7	Diversion or Reservoir	Reservoir	Reservoir to a Carrier by Exchange Delivery by the river
4.13.8	Reservoir or Plan	Reservoir or Plan	Out-of-Priority Bookover Bookover of an Out-of-Priority diversion
4.13.9	NA	Reservoir	Release for target contents Delivery by the river
4.13.10	Direct Flow	Reservoir	General Reservoir Replacement By direct release or exchange Delivery by the river
4.13.11	Direct Flow or Reservoir	Water Right	Carrier Right to a ditch or reservoir Delivery by a carrier
4.13.12	NA	NA	Reoperation Reoperate water rights
4.13.13	Instream Flow	Stream Gage	Index flow constraint on an instream flow diversion Note La Plata Compact uses this Operating Rule
4.13.14	Direct Flow or Reservoir	Direct Flow	Carrier Right with Constrained Demand Carrier constrained by the demand At both the destination and source Delivery by the river
4.13.15	Instream Flow	Water Right	Interruptible supply Based on a natural flow estimate Transfer a direct diversion water Right to an instream flow
4.13.16	Direct Flow	Water Right	Direct Flow Storage Allow the unused portion of a direct flow decree to be stored

			in a reservoir
4.13.17	Direct Flow	Index Station	Rio Grande Compact - Rio Grande portion
4.13.18	Direct Flow	Index Station	Rio Grande Compact – Conejos River portion
4.13.19	Direct Flow	River	Split Channel Operations
4.13.20	NA	Reservoir	San Juan Reservoir RIP Operation
4.13.21	Well	NA	Wells with Sprinkler Use
4.13.22	Direct Flow and Well	NA	Soil Moisture Use
4.13.23	Downstream Call	River	Downstream Call Operate a downstream call
4.13.24	Direct Flow or Reservoir or Plan	Water Right	Direct Flow Exchange Supply a direct flow or reservoir or plan by exchange of a water right From river or carrier
4.13.25	Direct Flow or Reservoir or Plan	Water Right	Direct Flow Bypass Supply a direct flow or reservoir or Plan by a bypass of a water right From river or carrier
4.13.26	T&C Plan	Reservoir or ReUse Plan	Reservoir, Recharge or ReUse Plan to a T&C Plan Supply a T&C or Augmentation plan from a Reuse Plan, Recharge Plan or a Reservoir
4.13.27	Diversion or Reservoir	Reservoir or Reuse Plan	Reservoir or ReUse Plan to a Diversion or Reservoir Direct with or without destination reuse Supply a diversion or reservoir from a Reservoir or Reuse Plan Directly from the river or a carrier
4.13.28	Diversion or Reservoir	Reservoir or ReUse Plan	Reservoir or ReUse Plan to a Diversion or Reservoir by exchange with or without destination reuse Supply a diversion or reservoir from a reservoir or plan by exchange By Exchange from the river or a carrier
4.13.29	NA	ReUse Plan	ReUse Plan Spill Release water from a plan Delivery by the river
4.13.30	Reservoir	Operating Rule	Reservoir Rediversion Redivert water released by

			another operating rule for a T&C plan
4.13.31	Direct Flow or Reservoir	Water Right	Carrier Right with Reuse
4.13.32	Direct Flow or Reservoir or Carrier	Reservoir & Reservoir Reuse Plan	Plan Reservoir and Plan to a direct flow or reservoir or carrier direct with or without destination reuse Delivery by the river or carrier
4.13.33	Direct Flow or Reservoir or Carrier	Reservoir & Reservoir Reuse Plan	Plan to a Direct Flow or reservoir or carrier by exchange with or without destination reuse Delivery by the river or carrier
4.13.34	Reservoir	Reservoir (bookover)	Bookover with Reuse with Reuse
4.13.35	Direct Flow or Reservoir or Carrier	Import Plan	Import to a Diversion, Reservoir or Carrier with or without Reuse Delivery by the river or carrier
4.13.36	Direct Flow	Water Right	Seasonal (daily) Water Right (e.g. Meadow Rights)
4.13.37	Plan	Well Water Right	Augmentation Well Pump an augmentation well to satisfy a T&C or Well Augmentation plan requirement
4.13.38	Direct Flow or Reservoir or Carrier	Water Right	Out-of-Priority Diversion Divert out-of-priority to a reservoir or a diversion with Respect to a senior reservoir right. Addresses the upstream storage statute.
4.13.39	Well or Diversion	Water Right	Alternate Point Pump or divert using an alternate Point of diversion
4.13.40	Diversion or Instream Flow	River	South Platte Compact Release Works in conjunction with a type 50 operating rule to 1) release Water to a user that is water short and located upstream of the Washington county line (e.g not in Water District 64) or 2) to the South Platte compact itself.
4.13.41	Reservoir	Water Right	Storage with Special Limits Limit reservoir storage by the amount diverted by one or more Out-of-Priority Plans
4.13.42	NA	Plan	Plan Reset
4.13.43	Well	River	In-Priority Supply

	Augmentation Plan		Determine if well depletions from pumping in a prior time step or terms and conditions accounted for in a Plan structure are in priority
4.13.44	Recharge Reservoir	Well Water Right	Recharge Well Pump a recharge well to a Recharge Reservoir
4.13.45	Direct Flow or Reservoir	Water Right	Carrier Right with Loss to a ditch or reservoir Delivery by a carrier
4.13.46	Admin Plan	Admin Plan	Multiple Ownership
4.13.47	NA	Plan	Plan Limits
4.13.48	Direct Flow or Reservoir or Carrier	Reservoir or Plan	Reservoir or Plan to Plan Direct
4.13.49	Plan or Reservoir Reuse	Plan	Reservoir or Plan to Plan Exchange
4.13.50	Plan	River	South Platte Compact Storage Works in conjunction with a type 40 operating rule to allow water to be diverted in priority to a plan that represents the South Platte compact

4.13.1 Reservoir Release to an Instream Flow (ityopr=1)

The type 1 operating rule provides a method to release water to an instream flow via the river.

```
Row-data        Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1             cidvri(1)         Operational right ID
1-2             nameo(1)          Operational right name
1-3             rtem(1)           Administration number
1-4             dumx              Monthly Switch
                                     0 No monthly on/off values
                                     12 Number of monthly on/off
                                        Switches provided
1-5             ioprsw(1)         Annual On/Off Switch
                                     0=off
                                     1=on
                                     +n Begin in year n
                                     -n Stop after year n

Destination Data
1-6             ciopde            Destination instream structure
1-7             iopdes(2,1)       Destination instream account (typically 1)

Supply Data
```

```
1-8             ciopso(1)          Supply reservoir ID
1-9             iopsou(2,1)        Supply reservoir account
1-10            ciopso(2)          0
1-11            iopsou(4,1)        0

Type Data
1-12            ityopr(1)          1

Associated Plan Data
1-13            creuse             NA

Diversion Type
1-14            cdivtyp            NA

Conveyance Loss (%)
1-15            OprLoss            0

Miscellaneous Limits
1-16            OprLimit           0

Start Date
1-17            IoBeg              First year of operation

End Date
1-18            IoEnd              Last year of operation


Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1             imonsw(1)          Monthly switch 0=off, 1=on
                                      +n Day first used that month
                                      -n Day last used that month
                                   Note the first entry corresponds to the first
                                      month specified in the control file
```

4.13.2 Reservoir Release to a Diversion or Reservoir or Carrier (ityopr=2)

The type 2 operating rule provides a method to release water to a reservoir, direct flow structure or a carrier via the river. In addition, it can be used to constrain a diversion to the capacity of up to 10 intervening structures or carriers. Note a diversion is implicitly constrained by the capacity of the destination structure (variable ciopde, row-data 1-6).

```
Row-data        Variable           Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
                1x,a12, 1x, 2f8.0, 2i8)
1-1             cidvri(1)          Operational right ID
1-2             nameo(1)           Operation right name
1-3             rtem(1)            Administration number
1-4             dumx               Monthly and Intervening Structure
                                   Switch
                                      +n Number of intervening structures
                                         (max = 10)
                                      -n Include -12 monthly on/off
                                         values minus n intervening
                                         structures.
```

```
                              Note, when a negative value is,
                                 provided, it should be -13 or less
                                 for 12 monthly values and 1
                                 intervening structure)
1-5            ioprsw(1)         Annual On/Off Switch
                                 0 off
                                 1 on
                                 +n Begin in year n
                                 -n Stop after year n

Destination Data
1-6            ciopde            Destination diversion ID or reservoir ID
1-7            iopdes(2,1)       Destination structure account
                                 For a diversion destination, enter 1
                                 For a reservoir destination, enter
                                    +n Account served by this right
                                    -n Fill first n accounts based on
                                       the ratio of their ownership

Supply Data
1-8            ciopso(1)         Supply reservoir ID
1-9            iopsou(2,1)       Supply reservoir account
1-10           ciopso(2)         0
1-11           iopsou(4,1)       0 = provide 100% replacement
                                 -1 = provide depletion replacement
Type Data
1-12           ityopr(1)         2

Associated Plan Data
1-13           creuse            NA

Diversion Type
1-14           divtyp            NA

Conveyance Loss (%)
1-15           OprLoss           0

Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation

End Date
1-18           IoEnd             First year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file

Intervening Structure Data
Include only if the monthly switch (dumx) = 1-10 or < -12 1-10 or < -12
Format (36x, 10a12)
3-1            intern(1,1)       For +dumx, Enter dumx intervening
                                    structure ID's
                                 For -dumx, Enter abs(dumx)-12
                                    intervening structure ID's
```

4.13.3 Reservoir Release to a Diversion or Reservoir by a carrier (ityopr=3)

The type 3 operating rule provides a method to release water to a reservoir or direct flow structure by a conduit (e.g. a pipeline or canal that flows directly from a reservoir to a user) rather than the river. In addition, it can be used to constrain a diversion to the capacity of up to 10 intervening structures or carriers. Note a diversion is implicitly constrained by the capacity of the destination structure (variable ciopde, row-data 1-6).

```
Row-data        Variable           Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1             cidvri(1)          Operational right ID
1-2             nameo(1)           Operational right name
1-3             rtem(1)            Administration number
1-4             dumx               Monthly and Structure Switch
                                      +n Number of intervening structures
                                      (max = 10)
                                      -n Include 12 monthly on/off values
                                         minus n intervening structures
                                         Note, when a negative value is,
                                         provided, it should be -13 or less)
1-5             ioprsw(1)          Annual On/Off Switch
                                      0=off
                                      1=on
                                      +n Begin in year n
                                      -n Stop after year n

Destination Data
1-6             ciopde             Destination diversion ID or destination
                                      reservoir ID
1-7             iopdes(2,1)        Destination structure account
                                   For a diversion destination, enter 1
                                   For a reservoir destination, enter
                                      +n Account to be served by this right
                                      -n Fill the first n accounts based on
                                         the ratio of their ownership

Supply Data
1-8             ciopso(1)          Supply reservoir ID
1-9             iopsou(2,1)        Supply reservoir account
1-10            ciopso(2)          0
1-11            iopsou(4,1)        0 = provide 100% replacement
                                   -1 = provide depletion replacement

Type Data
1-12            ityopr(1)          3

Associated Plan Data
1-13            creuse             NA

Diversion Type
1-14            cdivtyp            Diversion

Conveyance Loss (%)
1-15            OprLoss            0
```

```
Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation

End Date
1-18           IoEnd             Last year of operation


Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file

Intervening Structure Data
Include only if the monthly switch (dumx) = 1-10 or < -12 1-10 or < -12
Format (36x, 10a12)
3-1            intern(1,1)       For +dumx, Enter dumx intervening
                                    structure ID's
                                 For -dumx, Enter abs(dumx)-12
                                    intervening structure ID's
```

4.13.4 Reservoir Release to a Diversion by Exchange with the River (ityopr=4)

The type 4 operating rule provides a method to allow a direct flow diversion to occur via a reservoir exchange. In general, an exchange is required whenever a reservoir cannot serve a direct flow diversion or reservoir directly. When the destination variable ciopde (row-data = 1-6) is a structure ID, the exchange is not constrained by the structures water right. When the destination variable ciopde (row-data = 1-6) is a water right, the exchange is limited to its decreed amount less any diversions that have been charged to that right. For a direct diversion the limit is constrained to diversions that have occurred in the current time step. For a reservoir, the limit is constrained by storage that has occurred over the administrative season. The type 4 operating rule implicitly limits the exchange amount to ensure no senior, intervening water rights are impacted. Intervening rights are those water rights that occur between the diversion and a point downstream where the releasing reservoir's water is available.

```
Row-data       Variable          Description
 Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly Switch
                                    0 No monthly on/off values
                                    12 Number of monthly on/off switches provided
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
                                    -n Stop after year n
```

```
Destination Data
1-6             ciopde            Destination structure ID or water right
1-7             iopdes(2,1)       Destination structure account, enter 1 for a diversion

Supply Data
1-8             ciopso(1)         Supply reservoir ID
1-9             iopsou(2,1)       Supply reservoir account
1-10            ciopso(2)         0
1-11            iopsou(4,1)       0 = provide 100% replacement
                                  -1 = provide depletion replacement

Type Data
1-12            ityopr(1)         4

Associated Plan Data
1-13            creuse            NA

Diversion Type
1-14            cdivtyp           NA

Conveyance Loss (%)
1-15            OprLoss           0

Miscellaneous Limits
1-16            OprLimit          0

Start Date
1-17            IoBeg             First year of operation

End Date
1-18            IoEnd             Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1             imonsw(1)         Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file
```

4.13.5 Reservoir Storage by Exchange (ityopr=5)

The type 5 operating rule allows a reservoir to store water by an exchange with another reservoir. When the destination reservoir variable ciopde (row-data = 1-6) is a reservoir ID, the exchange is not constrained by the reservoir's water rights. When the variable ciopde (row-data = 1-6) is a water right, the exchange is limited to the water right specified less any diversions that have been charged to that right during the administrative season.

```
Row-data        Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
                1x,a12,1x, 2f8.0, 2i8)
1-1             cidvri(1)         Operational right ID
1-2             nameo(1)          Operational right name
1-3             rtem(1)           Administration number
```

1-4	dumx	Monthly Switch 0 No monthly on/off values 12 Number of monthly on/off switches provided
1-5	ioprsw(1)	Annual On/Off Switch 0=off 1=on +n Begin in year n -n Stop after year n
Destination Data		
1-6	ciopde	Destination reservoir ID or water right
1-7	iopdes(2,1)	Destination structure account For a reservoir destination, enter +n Account to be served by this right -n Fill the first n accounts based on the ratio of their ownership
Supply Data		
1-8	ciopso(1)	Supply reservoir ID
1-9	iopsou(2,1)	Supply reservoir account
1-10	ciopso(2)	0
1-11	iopsou(4,1)	0
1-12	ityopr(1)	5
Associated Plan Data		
1-13	creuse	NA
Diversion Type		
1-14	cdivtyp	NA
Conveyance Loss (%)		
1-15	OprLoss	0
Miscellaneous Limits		
1-16	OprLimit	0

```
Start Date
1-17           IoBeg           First year of operation First year of operation

End Date
1-18           IoEnd           First year of operation Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)       Monthly switch 0=off, 1=on
                                  +n Day first used that month
                                  -n Day last used that month
                               Note the first entry corresponds to the
                                  first month specified in the control file
```

4.13.6 Reservoir to Reservoir Transfer (Bookover) (ityopr=6)

The type 6 operating rule allows a reservoir to reservoir bookover to occur. It is commonly used to transfer water from one reservoir storage account to another in a particular month. In addition, it may be used to transfer water from one storage account to another based on the amount of water diverted by another operating rule specified under variable ciopso(2) (row-data 1-10). Finally if variable iopsou(4,1) (row-data 1-11) is set to 99 the transfer can be limited by the amount specified for diversion structure ciopso(2) (row-data 1-10) for the year and month provided in the direct diversion demand file (*.ddm).

```
Row-data       Variable        Description
ontrol Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri(1)       Operational right ID
1-2            nameo(1)        Operational right name
1-3            rtem(1)         Administration number
1-4            dumx            Monthly and Structure Switch
                                  0 No monthly on/off values
                                  12 Number of monthly on/off switches
                               provided
1-5            ioprsw(1)       Annual On/Off Switch
                                  0=off
                                  1=on
                                  +n Begin in year n
                                   n Stop after year n

Destination Data
1-6            ciopde          Destination reservoir ID
1-7            iopdes(2,1)     Destination structure account
                               For a reservoir destination, enter
                                  +n Account served by this right
                                  -n Fill the first n accounts based
                                     On the ratio of their ownership
Supply Data
1-8            ciopso(1)       Supply reservoir ID
1-9            iopsou(2,1)     Supply reservoir account
1-10           ciopso(2)       If not required enter 0
                               If limited by the amount diverted under
                                  an operating rule, enter the operating
                                  rule ID
```

```
                                 If limited by a diversion demand amount
                                    enter the diversion structure ID
1-11           iopsou(4,1)       0 if ciopso(2) is 0 or an operating
                                    rule ID
                                 99 if ciopso(2) is a diversion structure ID

Type Data
1-12           ityopr(1)         6

Associated Plan Data
1-13           creuse            NA

Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0

Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation

End Date
1-18           IoEnd             Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file
```

4.13.7 Diversion by a Carrier by Exchange (ityopr=7)

The type 7 operating rule provides a method to allow a diversion by a carrier via a reservoir exchange. In general, an exchange is required whenever a reservoir cannot serve a demand directly. This operating rule implicitly limits the exchange amount to ensure no senior, intervening water rights are impacted. Intervening rights are those water rights that occur between the storing reservoir and a point downstream where the releasing reservoir's water is available.

```
Row-data       Variable          Description
Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly Switch
                                    0 No monthly on/off values
                                    12 Number of monthly on/off switches provided
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
```

```
                                    -n Stop after year n
Destination Data
1-6            ciopde            Destination - Operational Right ID of the Carrier
1-7            iopdes(2,1)       Destination account
                                 For a diversion destination, enter 1
                                 For a reservoir destination, enter
                                    +n Account to be served by this right
                                    -n Fill the first n accounts based on
                                       the ratio of their ownership

Supply Data
1-8            ciopso(1)         Supply reservoir ID
1-9            iopsou(2,1)       Supply reservoir account
1-10           ciopso(2)         0
1-11           iopsou(4,1)
                                 See Section 7.15 for a discussion of the
                                 Reservoir demand options.
                                    0 = reservoir demand is not adjusted
                                   +n = Reservoir demand is limited to not
                                       exceed CIR/n; where n (%) is the efficiency
                                       of reservoir water use. Note n (%) is
                                       limited to not exceed the max system
                                       efficiency. Also a +n requires the variable
                                       efficiency option (ieffmax) from control
                                       file be on.

Type Data
1-12           ityopr(1)         7

Associated Plan Data
1-13           creuse            NA

Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0

Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation
End Date
1-18           IoEnd             Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file


Intervening Structure Data
Include only if the monthly switch (dumx) = 1-10 or < -12 1-10 or < -12
Format (36x, 10a12)
3-1            intern(1,1)       For +dumx, Enter dumx intervening
                                    structure ID's
                                 For -dumx, Enter abs(dumx)-12
```

```
intervening structure ID's
```

4.13.8 Out-Of-Priority Reservoir Bookover (ityopr=8)

The type 8 operating rule works in concert with an out-of-priority diversion (type 38) to book water

1.From an out-of-priority reservoir account to another reservoir account or

2.From an out-of-priority (OOP) plan to reduce its obligation.

This rule was significantly enhanced in July 2006 in order to address 1. Out out-of-priority diversions in addition to out-of-priority storage and 2. Out-of-priority storage and diversions occurring at more than one reservoir and diversion with regard to the same subordinated reservoir.

When the destination is a reservoir the out-of-priority diversion is typically kept in a separate account of the junior reservoir (e.g. an OOP account). Also an out-of-priority plan is used to track the amount taken. If the volume of water stored in the OOP plan exceeds the remaining capacity of the subordinated reservoir right, the Type 8 rule books water from the out-of-priority account to another general purpose account within the junior reservoir and the OOP plan obligation is reduced. To perform this activity the operating rule "associated" with the OOP diversion or storage being booked over must be known to the type 8 operating rule. If the subordinated reservoir right does not fill then a type 27 operating rule is typically used to transfer the water from the out-of-priority reservoir to the subordinated reservoir and adjust the obligation stored in the OOP Plan.

When the destination is an OOP Plan the out-of-priority diversion is stored under the OOP Plan. Once the volume of water stored in the OOP plan exceeds the remaining capacity of the subordinated reservoir right, the obligation stored in the OOP plan is reduced. To perform this activity the operating rule "associated" with the OOP diversion or storage being booked over must be known to the type 8 operating rule. If the subordinated reservoir right does not fill then a type 27 operating rule is typically used to transfer the water from a reservoir to the subordinated reservoir and adjust the obligation stored in the OOP Plan.

The following are noted:

- The variable ciopso(2) (row-data 1-10) is used to identify the senior decree that is being subordinated.
- The variable intern(n,1) (rule n, value 1) is used to identify the junior decree that will be credited withdiverting water out of priority when booked over.
- The variables intern(n,2) (rule n, value 2) through intern(n,10) (rule n, value 10) are used to identify up to 9 operating rules associated with this OOP plan.
- If the destination is a reservoir all OOP diversions are charged against the junior reservoir's water right when they are booked over to an account where they can be released.
- If the subordinated water right is not filled, the water stored out of priority is released to the subordinated reservoir at the end of the administration year assigned to each reservoir (see variable rdate in a reservoir station file (*.res)).

- The type 8 operating rule has generic applications but was originally developed to handle the Blue River decree that allows OOP storage of water in Dillon Reservoir (an upstream junior reservoir), OOP storage of water in Blue Lake (an upstream reservoir), OOP diversion to Roberts Tunnel (an upstream junior diversion), and an OOP diversion to the Con Hoosier system before Green Mountain Reservoir (a downstream senior) is filled. See Section 7, Frequently Asked Questions, for additional description of the Blue River Decree implementation to the Colorado River Basin.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly switch
                                 Enter 2 if no on/off switches are provided
                                    e.g. one for an associated Water Right and
                                    one for an associated operating Rule
                                 Enter -14 if on/off switches are provided
                                    e.g. twelve on/off switches,
                                    one for an associated Water Right and
                                    one for an associated operating Rule
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
                                    -n Stop after year n

Destination Data
1-6            ciopde            Destination reservoir ID or Plan ID
1-7            iopdes(2,1)       Destination structure account
                                 For a reservoir destination, enter
                                    +n Account to be served by this right
                                    -n Fill the first n accounts based on
                                       the ratio of their ownership

Supply Data
1-8            ciopso(1)         If the destination is a reservoir enter
                                    the supply reservoir ID (same as the
                                    destination ID)
                                 If the destination is a Plan enter NA
1-9            iopsou(2,1)       If the destination is a reservoir enter
                                    the supply reservoir account
                                 If the destination is a Plan enter NA
1-10           ciopso(2)         Supply (subordinated) water right ID
1-11           iopsou(4,1)       0

Type Data
1-12           ityopr(1)         8

Associated Plan Data
1-13           creuse            Out-of-Priority Plan ID

Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0
```

```
Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation

End Date
1-18           IoEnd             Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file

Destination Water Right or Associated Reservoirs
Include only if the monthly switch (dumx) = +n or < -12
3                                Format (36x, 10a12)
3-1            intern(1,1)       The destination water right ID
                                    (the one storing Out-of-Priority)
3-2            intern(1,2)       The OOP operational right associated
                                    with this bookover
                                 Note must be provided in the *.opr
                                    file before the bookover right
```

4.13.9 Reservoir Target (ityopr=9)

The type 9 operating rule allows reservoir releases to be made from a reservoir to satisfy a target reservoir content specified in the *.tar file. This operating rule is commonly applied to simulate flood control operations where forecast data is are unavailable. In addition, it may be used to simulate hydropower operations when a hydropower demand cannot be specified by other means.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly Switch
                                    0 No monthly on/off values
                                    12 Number of monthly on/off switches
                                 provided
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
                                    -n Stop after year n

Destination Data
1-6            ciopde            NA
1-7            iopdes(2,1)       0
```

```
Source Data
1-8            ciopso(1)          Reservoir ID
1-9            iopsou(2,1)        Reservoir account; Enter 0 to meet target
                                     levels by releasing from each account by
                                     the proportionate amount currently in each
1-10           ciopso(2)          0
1-11           iopsou(4,1)        0

Type Data
1-12           ityopr(1)          9

Associated Plan Data
1-13           creuse             NA

Diversion Type
1-14           cdivtyp            NA

Conveyance Loss (%)
1-15           OprLoss            0

Miscellaneous Limits
1-16           OprLimit           0

Start Date
1-17           IoBeg              First year of operation

End Date
1-18           IoEnd              Last year of operation


Monthly Data
Include only if the monthly switch (dumx) = 12
2                                 Free Format
2-1            Imonsw(1)          Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file
```

4.13.10 General Replacement Reservoir to a Diversion by a Direct Release or Exchange (ityopr=10)

The type 10 operating rule provides a method to supply reservoir water to a large number of structures without supplying individual operating rules for each. The following are noted:

- The operating rule checks whether reservoir replacement water will be supplied to a diversion by a direct reservoir release or exchange.
- The operating rule serves all water rights which are senior to its Administration number which have variable "ireptyp" of the Direct Diversion Station File (*.dds) set to 1 or -1.
- The variable “ireptyp” specified by structure in the diversion station (*.dds) file specifies if replacement releases are to be made for the full diversion (ireptyp=1) or depletion (ireptyp=-1) or not at all (ireptyp=0).

- When more than one replacement reservoir is specified, they are sorted by Administration number and operate by priority, most senior first.

- The replacement reservoir operating rule applies to direct flow structures only, therefore carrier systems must be tied to a replacement reservoir directly. The following are is noted:

- The replacement reservoir operating rule has generic applications but was originally developed to handle the replacement reservoir obligations of Green Mountain Reservoir in the Colorado River Basin.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operation right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly Switch
                                    0 No monthly on/off values
                                    12 Number of monthly on/off switches
                                 provided
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on

Destination Data
1-6            ciopde            0
1-7            iopdes(2,1)       0

Source Data
1-8            ciopso(1)         Supply reservoir ID
1-9            iopsou(2,1)       Supply reservoir account
1-10           ciopso(2)         NA
1-11           iopsou(4,1)       0 (not used)

Type Data
1-12           ityopr(1)         10

Associated Plan Data
1-13           creuse            NA

Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0

Miscellaneous Limits
1-16           OprLimit          0 Do not adjust Monthly or Annual
                                    Operational limits
                                 1 Operating Rule ID specified in row 3
                                    for which monthly and Annual limits
                                    will be INCREASED by the amount released
                                 2 Operating Rule ID specified in row 3
                                    for which monthly and Annual limits
                                    will LIMIT the amount released

Start Date
1-17           IoBeg             First year the operating rule is on
```

```
End Date
1-18           IoEnd            Last year the operating rule is on



Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)        Monthly switch 0=off, 1=on
                                   +n Day first used that month
                                   -n Day last used that month
                                Note the first entry corresponds to the first
                                   month specified in the control file


Monthly and Annual Limitation Data
Include only if the switch (OprLimit > 0)
Format (36x, 10a12)
3-1            cx               If OprLimit=1, Operating Rule ID
                                   for which monthly and Annual limits
                                   will be INCREASED by the Amount released.
                                If OprLimit=2, Operating Rule ID
                                   for which monthly and Annual limits
                                   will LIMIT the Amount released
```

4.13.11 Carrier Right to a Ditch or Reservoir (ityopr=11)

The type 11 operating rule provides a method to divert water to a reservoir or direct flow structure using another structure's water rights. In addition, it can be used to constrain a diversion to the capacity of up to 10 intervening structures.The following are noted:

- A diversion is implicitly constrained by the capacity of the destination structure (variable ciopde).

- The source water right may operate as a standard direct flow right and/or as a carrier. When the variable iopsou(2,1) = 1 the right is used as a carrier only. When the variable iopsou(2,1) = 0 the right is used as both a direct flow right and a carrier right.

- If several operating rules use the same water right, diversions are not allowed to exceed the decreed capacity.

- If the destination is a diversion, the demand is the destination structure's demand. Any return flows use the return flow pattern and locations assigned to the destination structure in the diversion station file (*.dds).

- If the destination is a reservoir, the operating rule demand is the destination reservoir's capacity.

- If the destination is a reservoir and the source is a diversion right, the operating rule diversion IS NOT CHARGED against the reservoir's decree.

- If the destination is a reservoir and the source is a reservoir right, the operating rule diversion IS CHARGED against the reservoir's decree.

- If carrier losses are to be included use a type 45 operating rule.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri            Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number. Note if
                                    ciopso(1) is a diversion right,
                                    its administration number is
                                    used and rtem is ignored
1-4            dumx              Monthly and Structure Switch
                                    +n Number of intervening structures
                                       (max = 10)
                                    -n Include -12 for monthly on/off
                                       values minus n intervening
                                       structures
                                       Note, when a negative value is,
                                       provided, it should be -13
                                       or less).
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n=Begin in year n
                                    -n=Stop after year n

Destination Data
1-6            ciopde            Destination diversion or reservoir ID
1-7            iopdes(2,1)       Destination structure account,
                                    1 for a diversion destination
                                    +n for a reservoir destination,
                                    +n Account served by this right
                                    -n Fill the first n accounts using
                                       the ratio of their ownership

Source Data
1-8            ciopso(1)         Water right ID under which the
                                    diversion occurs
                                    Note may be a diversion right or
                                    a reservoir right
1-9            iopsou(2,1)       0 The source water right (ciopso(1))
                                    is left on (i.e. it can be used
                                    as a both a direct flow right
                                    and this operating rule).
                                 1 The source water right (ciopso2(1)
                                    is turned off (i.e. it can only be used
                                    by this operating rule)
1-10           ciopso(2)         NA the water right is administered at
                                    the location specified in the
                                    appropriate water right file
                                 +n the water right is administered at
                                    location n (e.g. a reservoir right
                                    is administered at a
                                    the location of a carrier)
1-11           iopsou(4,1)       0 Not used

Type Data
1-12           ityopr(1)         11

Plan Data
```

```
1-13            creuse              NA If the carrier loss is not
                                       associated with a recharge source
                                       +n
                                    Enter Recharge Plan ID If the
                                       carrier loss is a recharge source.
                                       Note the Plan type must be recharge
                                       (type 8)

Diversion Type
1-14            cdivtyp             NA

Conveyance Loss (%)
1-15            OprLoss             0

Miscellaneous Limits
1-16            OprLimit            0 No carrier limitation
                                       +n Carrier limit (cfs) Note this
                                          value is an additional constraint
                                          that is imposed on a carrier
                                          since the capacity of the diverting
                                          structure and all carriers is an
                                          implicit constraint. This value is
                                          typically used to represent the
                                          maximum diversion rate allowed to
                                          fill a reservoir

Start Date
1-17            IoBeg               First year of operation

End Date
1-18            IoEnd               Last year of operation


Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1             imonsw(1)           Monthly switch 0=off, 1=on
                                       +n Day first used that month
                                       -n Day last used that month
                                    Note the first entry corresponds
                                       to the first month specified in
                                       the control file


Intervening Structure Data
Include only if the monthly switch (dumx) = 1-10 or < -12 1-10 or < -12
Format (36x, 10a12)
3-1             intern(1,1)         For +dumx, Enter dumx intervening
                                       structure ID's
                                    For -dumx, Enter abs(dumx) - 12
                                       intervening structure ID's
```

4.13.12 Reoperation (ityopr=12)

The type 12 operating rule provides a method to speed up model execution while incurring some level of inaccuracy. It is typically used in coordination with the control file variable ireopx. When the control file variable ireopx is set to 0, all activities that supply new water to the system (reservoir releases, return flows to non downstream tributaries, etc.) automatically cause the model to reoperate with no inaccuracy and this operating rule is not required. When the control file variable ireopx is set to 1, this operating rule initiates reoperation at the Administration number specified. Reoperation, as used herein, restarts the water right allocation procedure from senior to junior in order to allow senior ditches to benefit from any new water that might have been introduced to the system.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri            Operational right ID
1-2            nameo(1)          Operation right name
1-3            rtem(1)           Administration number
1-4            dumx              0
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n=Begin in year n
                                    -n=Stop after year n
1-6            ciopde            0

Destination Data
1-7            iopdes(2,1)       0
1-8            ciopso(1)         0

Supply Data
1-9            iopsou(2,1)       0
1-10           ciopso(2)         0
1-11           iopsou(4,1)       0

Type Data
1-12           ityopr(1)         12

Associated Plan Data
1-13           creuse            NA
Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0

Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation

End Date
1-18           IoEnd             Last year of operation


Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file
```

4.13.13 La Plata Compact (Index Flow) (ityopr=13)

The type 13 operating rule allows an instream flow to operate based on its location on the river and the stream flow at a remote location. This rule has generic applications but was originally developed to handle the La Plata River compact in the San Juan River Basin. This compact, in general, limits Colorado's commitment to deliver water to New Mexico based on the flow at an upstream, index gage. Additional discussion of the La Plata Compact implementation is provided in section 7.28

```
Row-data        Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1             cidvri(1)         Operational right ID
1-2             nameo(1)          Operational right name
1-3             rtem(1)           Administration number
1-4             dumx              Monthly Switch
                                     0 No monthly on/off values
                                     12 Number of monthly on/off switches provided
1-5             ioprsw(1)         Annual On/Off Switch
                                     0=off
                                     1=on
                                     +n=Begin in year n
                                     -n=Stop after year n
Destination Data
1-6             ciopde            Destination Instream Flow
1-7             iopdes(2,1)       Destination Account, enter 1
Supply Data
1-8             ciopso(1)         River ID of the Index flow station
1-9             iopsou(2,1)       Percent of the Index flow station available
1-10            ciopso(2)         Instream Flow water right
1-11            iopsou(4,1)       1 The source water right (ciopso(2) is turned off)
                                     i.e. it can only be used by this operating rule)

Type Data
1-12            ityopr(1)         13

Associated Plan Data
1-13            creuse            NA

Diversion Type
1-14            cdivtyp           NA

Conveyance Loss (%)
1-15            OprLoss           0

Miscellaneous Limits
1-16            OprLimit          0

Start Date
1-17            IoBeg             First year of operation

End Date
1-18            IoEnd             Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1             imonsw(1)         Monthly switch 0=off, 1=on
                                     +n Day first used that month
```

```
                                          -n Day last used that month
                                       Note the first entry corresponds to the first
                                          month specified in the control file
```

4.13.14 Carrier Right with Constrained Demand (ityopr=14)

The type 14 operating rule provides a method to divert water to a reservoir or direct flow structure using another structure's water rights. It is similar to the type 11 operating rule except the amount diverted is constrained to not exceed the demand of the structure associated with the source water right (variable ciopso(1) row-data 1-8). The following are noted:

- When the variable iopsou(4,1) is equal to 0, the diverting structure's demand is limited to the monthly value read from the direct flow demand (*.ddm) file. When the variable iopsou(4,1) is greater than 1, the diverting structure's demand for the year is limited to the annual value read as variable iopsou(4,1).

- The source water right may operate as a standard direct flow right and/or as a carrier. When the variable iopsou(2,1) = 1 is the right is used as a carrier only. When the variable iopsou(2,1) = 0 the right is used as both a direct flow right and a carrier right.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri            Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number.Note if ciopso(1) is
                                    a diversion right, its administration
                                    number is used and rtem is ignored.
1-4            dumx              Monthly and Structure Switch
                                    +n Number of intervening structures
                                       (max = 10)
                                    -n Include -12 monthly on/off values
                                       minus n intervening structures
                                       Note, when a negative value is,
                                       provided, it should be -13 or less)
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n=Begin in year n
                                    -n=Stop after year n

Destination Data
1-6            ciopde            Destination diversion ID or reservoirID
1-7            iopdes(2,1)       Destination structure account
                                 For a diversion destination, enter 1
                                 For a reservoir destination, enter
                                    +n Account to be served by this right
                                    -n Fill the first n accounts based on
                                       the ratio of their ownership

Source Data
1-8            ciopso(1)         Water right ID under which the diversion occurs
                                    (must be a diversion right)
1-9            iopsou(2,1)       0 The source water right (ciopso(1)) is left on
```

```
                              (i.e. it can be used as a both a direct flow
                              right and this operating rule)
                           1 The source water right (ciopso2(1) is turned off
                              (i.e. it can only be used by this operating rule)

1-10           ciopso(2)         NA (not used)
1-11           iopsou(4,1)       1 Monthly diversion limit is provided in the
                              direct diversion demand file (*.ddm) for
                              ciopso(2)
                           +n Annual diversion limit (acft). Note any data
                              provided in the direct diversion demand file
                              (*.ddm) is ignored.

Type Data
1-12           ityopr(1)         14
Associated Plan Data
1-13           creuse            NA

Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0

Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation

End Date
1-18           IoEnd             Last year of operation


Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                              +n Day first used that month
                              -n Day last used that month
                           Note the first entry corresponds to the first
                              month specified in the control file

Intervening Structure Data without loss
Include only if the monthly switch (dumx) = 1-10 or < -12 1-10 or < -12
Format (36x, 10a12)
3-1            intern(1,1)       For +dumx, Enter dumx intervening
                              structure ID's
                           For -dumx, Enter abs(dumx)-12
                              intervening structure ID's
```

4.13.15 Interruptible Supply Direct (ityopr=15)

The type 15 operating rule allows a direct flow diversion's water right (ciopso(2)) to defer its ability to divert in order to supply water to an instream flow located downstream. The rule may or may not operate in a given year based on the flow (iopsou(2)) at a specified location (ciopso(1)) in the network in the month indicated when variable imonsw(i) is equal to 2. The following comments are provided to assist in using and interpreting this operating rule:

- Once a water right has chosen to interrupt their supply and provide water to the instream flow, it cannot reoperate until it is turned off.

- The amount available for diversion is the minimum available to the source water right when it is in priority (i.e. diversion to instream flow = min (instream flow demand, direct diversion water right, direct diversion demand, available flow to direct diversion).

- Variable iopsou(4,1) allows the user to specify if the amount transferred is the total amount diverted or the amount that would have been consumed.

- The monthly on/off switches (imonsw(i)) allows the operating rule to continue from one simulation year through the next (e.g. begin in August of one year and continue through October of the next year). However, this ability requires the operating rule not operate until the first on switch (imonsw(i) = 2) is encountered.

- The Administration number assigned to the source water right overrides the variable rtem(1) provided with the operating rule.

- Because this operating rule has the ability to turn on and off based on a discharge, this operating rule is either on or off (i.e. the user is not allowed to initiate its operation during the study period by specifying a year for variable ioprsw(1).

```
Row-data       Variable          Description

Source Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri            Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number. Note since ciopso(1) is
                                    a water right, its administration
                                    number is used and rtem(1)is ignored.
1-4            dumx              Monthly Switch
                                    0=No monthly on/off values
                                    12=Number of monthly on/off switches
                                    provided
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n=Begin in year n
                                    -n=Stop after year n

Destination Data
1-6            ciopde            Destination instream flow ID
1-7            iopdes(2,1)       1 Destination structure account

Source Data
1-8            ciopso(1)         Stream ID used to determine if the interruptible
                                    supply operating rule will be used
1-9            iopsou(2,1)       Natural streamflow (acft) below which the
                                    interruptible supply operating rule
                                    will be used
1-10           ciopso(2)         Direct flow diversion water right to be used
                                    as the interruptible supply
1-11           iopsou(4,1)       0 = allow 100% of the decree to be diverted
                                 -1 = allow depletion (CU) to be diverted

Type Data
```

```
1-12           ityopr(1)         15
```

Associated Plan Data

```
1-13           creuse            NA
```

Diversion Type

```
1-14           cdivtyp           NA
```

Conveyance Loss (%)

```
1-15           OprLoss           0
```

Miscellaneous Limits

```
1-16           OprLimit           0
```

Start Date

```
1-17           IoBeg             First year of operation
```

End Date

```
1-18           IoEnd             Last year of operation
```

Monthly Data

Free Format

Include only if the monthly switch (dumx) = 12 or less than -12

```
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file
```

Intervening Structure Data

Include only if the monthly switch (dumx) = 1-10 or < -12

Format (36x, 10a12)

```
3-1            intern(1,1)       For +dumx, Enter dumx intervening
                                    structure ID's
                                 For -dumx, Enter abs(dumx)-12
                                    intervening structure ID's
```

4.13.16 Direct Flow Storage Direct (ityopr=16)

The type 16 operating rule allows a direct flow diversion's water right (ciopso(1)) to store in account (iopdes(2,1) of reservoir (ciopde). The amount stored may be limited by a maximum exchange percent (iopsou(4,1)); which is the same as 100 - a bypass percent. The following comments are provided to assist in using and interpreting this operating rule:

- A water right may operate as a standard direct flow right and/or as a direct flow storage right. When the variable iopsou(2,1) = 0 is the right is used as a direct flow storage right only. When the variable iopsou(2,1) = 1 is the right is used as both a direct flow right and a direct flow storage right.

- The source water right must be associated with 1 user (i.e. multiple users at the same diversion are not supported).

- Because a direct flow storage right may be used to serve both a direct flow storage user and as a direct flow storage right, the Administration number assigned to the operating rule is used in the analysis (i.e. it is not overridden by the source water rights administration number).

- Variable iopsou(4,1) allows the user to specify the maximum percent of the remaining decree that may be stored. This maximum percent is equivalent to 100 - a bypass percent.

- Direct flow storage is limited to the irrigation season by evaluating the demand associated with the structure tied to the source water right in the direct flow demand file (*.ddm). In addition, the user may control seasonal demands using the monthly on/off switch (imonsw(i)).

- The amount available for diversion is the minimum physical water available, remaining decree (e.g. some of the decree may have been used for direct diversion purposes), the exchange potential between the direct flow right and the reservoir, the maximum direct flow storage percent, the remaining reservoir volume, the reservoir target, the remaining reservoir account volume.

```
Row-data        Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
                1x,a12,1x, 2f8.0, 2i8)
1-1             cidvri            Operational right ID
1-2             nameo(1)          Operational right name
1-3             rtem(1)           Administration number
1-4             dumx              Monthly and Structure Switch
                                     +1 Destination Structure ID
                                        (use to provide demand data
                                        when the destination is tied
                                        to a carrier)
                                     -n Include -12 monthly on/off values
                                        minus n destination structure IDs
                                        (use to provide demand data
                                        when the destination is tied
                                        to a carrier)
1-5             ioprsw(1)         Annual On/Off Switch
                                     0=off
                                     1=on
                                     +n=Begin in year n
                                     -n=Stop after year n

Destination Data
1-6             ciopde            Destination reservoir ID
1-7             iopdes(2,1)       Destination reservoir account

Source Data
1-8             ciopso(1)         Direct Flow water right ID
1-9             iopsou(2,1)       0 The source water right (ciopso(1)) is left on
                                     (e.g. it can be used as a both a direct flow right
                                     and this operating rule)
                                  1 The source water right (ciopso2(1) is turned off
                                     (e.g. it can only be used by this operating rule)
1-10            ciopso(2)         0 (not used)
1-11            iopsou(4,1)       Maximum direct flow storage percent

Type Data
1-12            ityopr(1)         16

Associated Plan Data
```

1-13	creuse	NA

Diversion Type

1-14	cdivtyp	NA

Conveyance Loss (%)

1-15	OprLoss	0

Miscellaneous Limits

1-16	OprLimit	0

Start Date

1-17	IoBeg	First year of operation

End Date

1-18	IoEnd	Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12

2-1	imonsw(1)	Monthly switch 0=off, 1=on +n Day first used that month -n Day last used that month Note the first entry corresponds to the first month specified in the control file

Demand Data
Include only if the monthly switch (dumx) = +n or < -12
Format (36x, 10a12)

3-1	Intern(1,1)	Enter the destination structure ID (use to provide demand datawhen the destination is tied to a carrier)

4.13.17 Rio Grande Compact - Rio Grande River Direct (ityopr=17)

The type 17 operating rule was developed specifically for the Rio Grande River's portion of the Rio Grande Compact. Unlike most other operating rules, it requires two rows of data. The first row of data expects:

- The destination to be an Instream flow (i.e. an Instream flow right just below the Rio Grande at Labatos gage).
- Source 1 to be the stream gage that represents the index flow (i.e. Rio Grande at Del Norte)
- Source 2 to be the stream gage used to adjust to the discharge at the Instream flow location (i.e. the combined discharge of the Conejos River near La Sauses).

The second row of data expects:

- Qdebt is the year when annual obligation calculations begin to include adjustments for the cumulative surplus / shortage (i.e. 1985)
- Qdebtx is the initial surplus / shortage (acft) for Rio Grande (e.g. 944,000 * 60%).
- Source 3 is not used.
- The Source 4 coefficient represents the annual yield (acft/yr) of the Closed Basin Project to the Rio Grande River.
- The Source 5 coefficient represents the annual discharge of the Norton Drain South to the Rio Grande River.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri            Operational right ID
1-2            nameo(1)          Operational right nam
1-3            rtem(1)           Administration number
1-4            dumx              Enter -8 if no monthly switches included.
                                 Enter -20 if monthly switches are included.
                                 Note the above allows 2 - 3 rows of data
                                    to be provided for this operational rule
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                     +n=Begin in year n
                                    -n=Stop after year n

Destination Data
1-6            ciopde            Destination instream flow ID
1-7            iopdes(2,1)       Coefficient (1.0)

Source Data
1-8            ciopso(1)         Source 1 (Index Gage)ID (Rio Grande at
                                    Del Norte)
1-9            iopsou(2,1)       Source 1 coefficient (1.0)
1-10           ciopso(3)         Source 2 (Index Gage) ID (Combined Conejos
```

```
                               River nr La Sauses)
1-11           iopsou(4,1)        Source 3 coefficient (-1.0)
```

Type Data

```
1-12           ityopr(1)          17
```

Associated Plan Data

```
1-13           creuse             NA
```

Diversion Type

```
1-14           cdivtyp            NA
```

Conveyance Loss (%)

```
1-15           OprLoss            0
```

Miscellaneous Limits

```
1-16           OprLimit           0
```

Start Date

```
1-17           IoBeg              First year of operation
```

End Date

```
1-18           IoEnd              Last year of operation
```

Additional Compact Data

```
2              Format (12x, 24x, 12x, 4x, 12x,f8.0, f8.0, 3(1x, a12, i8))
2-1            qdebt              Year when annual obligation
                                     calculation includes an adjustment
                                     for the cumulative surplus shortage
2-2            qdebtx             Initial surplus/shortage (acft) for
                                     the Rio Grande in the year this
                                     operating rule begins
2-3            ciopso(5)          Source 3 (not used on Rio Grande)
2-4            iopsou(6,1)        Source 3 Coefficient (1.0)
2-5            ciopso(7)          Source 4 not used (enter Closed Basin)
2-6            iopsou(8,1)        Source 4 Closed Basin annual yield to
                                     Rio Grande (e.g. 19,200 acft/yr)
2-7            ciopso(9)          Source 5 not used (NortonDrnS)
2-8            iopsou(10,1)       Source 5 Norton Drain South annual yield
                                     to Rio Grande(e.g. -4000 acft/yr)
```

Monthly Data

Free Format

Include only if the monthly switch (dumx) = 12 or less than -12

```
2-1            imonsw(1)          Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file
```

4.13.18 Rio Grande Compact - Conejos River Direct (ityopr=18)

The type 18 operating rule was developed specifically for the Conejos River's portion of the Rio Grande Compact. Unlike most other operating rules, it requires two rows of data. The first row of data expects:

- The destination to be an Instream flow (i.e. an Instream flow just below the combine Conejos River near La Sauses).

- Source 1 is the stream gage that represents the first index flow (i.e. Conejos River near Magote).

- Source 2 is the stream gage that represent the second index flow (i.e. Los Pinos River near Ortiz).

The second row of data expects:

- Qdebt is the year when annual obligation calculations begin to include adjustments for the cumulative surplus / shortage (i.e. 1985).

- Qdebtx is the initial surplus / shortage (acft) for the Conejos River (e.g. 944,000 * 40%).

- Source 3 is the stream gage that represents the third index flow (San Antonio River at Ortiz).

- The Source 4 coefficient is used to represent the annual yield (acft/yr) of the Closed Basin Project to the Conejos River.

- The Source 5 coefficient is used to represent the annual discharge of the Norton Drain South to the Conejos River.

Note the format of a standard operational right input file has been adjusted to include a third source and account (coefficient).

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri            Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Enter -8 if no monthly switches included
                                 Enter -20 if monthly switches are included
                                 Note the above allows 2 or 3 rows of data
                                    to be recognized for this operational
                                    rule
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n=Begin in year n
                                    -n=Stop after year n

Destination Data
1-6            ciopde            Destination instream flow ID
1-7            iopdes(2,1)       Coefficient (1.0)

Source Data
1-8            ciopso(1)         Source 1 (Index Gage)ID (Conejos River
                                    near Magote)
1-9            iopsou(2,1)       Source 1 coefficient (1.0)
1-10           ciopso(2)         Source 2 (Index Gage) ID (Los Pinos River
                                    near Ortiz)
1-11           iopsou(4,1)       Source 2 coefficient (1.0)

Type Data
1-12           ityopr(1)         18
```

```
Associated Plan Data
1-13           creuse            NA

Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0

Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation

End Date
1-18           IoEnd             Last year of operation

Additional Compact Data
2              Format (12x, 24x, 12x, 4x, 12x,f8.0,f8.0, 3(1x, a12, i8))
2-1            qdebt             Year when annual obligation
                                    calculations include an adjustment
                                    for the cumulative surplus shortage
2-2            qdebtx            Initial surplus/shortage (acft) for
                                    the Conejos in the year this operating
                                    rule begins
2-3            ciopso(5)         Source 3 (Index Gage) ID (San Antonio River
                                    at Ortiz)
2-4            iopsou(6,1)       Source 3 Coefficient (1.0)
2-5            ciopso(7)         Source 4 not used (enter ClosedBasin
                                    for documentation purposes)
2-6            iopsou(8,1)       Source 4 Closed Basin annual yield to
                                    Conejos (e.g. 12,800 acft/yr)
2-7            ciopso(9)         Source 5 not used (enter NortonDrnS
                                    for documentation purposes)
2-8            iopsou(10,1)      Source 5 Norton Drain South annual
                                    yield to Conejos(e.g. 4000 acft/yr)

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file
```

4.13.19 Split Channel Operations (ityopr=19)

The type 19 operating rule for split channel operations is currently under development. Standard carrier operating rules for each water right associated with the split channel can be used.

4.13.20 San Juan Reservoir RIP Reservoir Operation (ityopr=20)

The type 20 operating rule was developed to simulate Navajo Reservoir (Division 7) operation under the San Juan Recovery Implementation Plan (SJRIP Hydrology Model Documentation March 24, 2000). Unlike most other operating rules, it requires two rows of data. The first row of data expects:

- The source reservoir (ciopso(1)) and account (iopsou(2,1)).

The second row of data expects:

- sjmina, the minimum available water for the reservoir (acft).
- sjrela, the average release (cfs).

Note this operating rule expects a file of perturbation data provided by a sediment transport analysis, to be provided as part of a time series file (*.ipy). This optional file is provided by setting the control file (*.ctl) variable (itsfile) to 1 to indicate a time series file will be read and providing the response file (*.rsp) the time series files name.

```
Row-data        Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly Switch
                                    0 No monthly on/off values
                                    12 Number of monthly on/off switches
                                       provided
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n=Begin in year n
                                    -n=Stop after year n

Destination Data
1-6            ciopde            NA
1-7            iopdes(2,1)       0

Source Data
1-8            ciopso(1)         Reservoir ID
1-9            iopsou(2,1)       Reservoir account; Enter 0 to meet target
                                    levels by releasing from each account by
                                    the proportionate amount currently in each
1-10           ciopso(2)         0
1-11           iopsou(4,1)       0

Type Data
1-12           ityopr(1)         20

Associated Plan Data
1-13           creuse            NA

Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0
```

```
Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation

End Date
1-18           IoEnd             Last year of operation


Additional Data
2                                Format (12x, 24x, 12x, 4x, 12x, f8.0, f8.0)
2-1            sjmina            Minimum available water (acft)
2-2            sjrela            Average release (af/yr)

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
3-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file
```

4.13.21 Wells with Sprinkler Use (ityopr=21)

The type 21 operating rule allows the administration date for wells with sprinklers to be different than that specified by the well water rights (*.wer) file. This operating rule is commonly applied to simulate maximum water supply mode (see Section 7.10) which preferentially meets a structures demand by wells with sprinklers first, surface water second and wells with flood irrigation last. Note this operating rule expects, and checks, that the control file (*.ctl) variables *itsfile*, *ieffmax* and *isprnk* are set appropriately. As described in Section 4.2, the control variable *itsfile* provides sprinkler area, sprinkler efficiency and *gwmode* data; the control variable *ieffmax* provides flood efficiency data; and the variable *isprnk* specifies sprinklers will be used. Note the irrigation practice time series file (*.ipy) variable *gwmode* must equal 1 (maximum supply) in order for this operating rule to apply.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              0
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
                                    -n Stop after year n

Destination Data
1-6            ciopde            NA
1-7            iopdes(2,1)       0

Source Data
1-8            ciopso(1)         NA
1-9            iopsou(2,1)       0
```

```
1-10           ciopso(2)         NA
1-11           iopsou(4,1)       0
```

Type Data

```
1-12           ityopr(1)         21
```

Associated Plan Data

```
1-13           creuse            NA
```

Diversion Type

```
1-14           cdivtyp           NA
```

Conveyance Loss (%)

```
1-15           OprLoss           0
```

Miscellaneous Limits

```
1-16           OprLimit          0
```

Start Date

```
1-17           IoBeg             First year of operation
```

End Date

```
1-18           IoEnd             Last year of operation
```

Monthly Data

Free Format

Include only if the monthly switch (dumx) = 12 or less than -12

```
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file
```

4.13.22 Soil Moisture Use (ityopr=22)

The type 22 operating rule allows the administration date for soil moisture use to be specified for all ditches and wells with one operational right. This operating rule is commonly applied when soil moisture accounting is included in the analysis (control variable *soild* = 1). Note this operating rule expects, and checks, that the control file (*.ctl) variables *itsfile*, *ieffmax* and *soild* are set appropriately. As described in Section 4.2, the control variable *soild* allows water deliveries in excess of a diversion's consumptive demand to be stored in the soil moisture zone. This operating rule allows the administration date to be specified that controls when water stored in the soil moisture zone is used (e.g. after surface rights, after well right, etc.). Note the soil moisture accounting requires the variable efficiency option be on by setting the annual time series file control variable (itsfile) equal to 10.

Row-data   Variable   Description

Control Data

```
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              0
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
```

```
                              -n Stop after year n

Destination Data
1-6            ciopde             NA
1-7            iopdes(2,1)        0

Source Data
1-8            ciopso(1)          NA
1-9            iopsou(2,1)        0
1-10           ciopso(2)          NA
1-11           iopsou(4,1)        0

Type Data
1-12           ityopr(1)          22

Associated Plan Data
1-13           creuse             NA

Diversion Type
1-14           cdivtyp            NA

Conveyance Loss (%)
1-15           OprLoss            0

Miscellaneous Limits
1-16           OprLimit           0

Start Date
1-17           IoBeg              First year of operation

End Date
1-18           IoEnd              Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)          Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file
```

4.13.23 Downstream Call Direct (ityopr=23)

The type 23 operating rule allows a downstream call to be provided which limits any upstream diversions, reservoir storage, etc. that are junior to the calls administration number. The following comments are provided to assist in the use and interpretation this operating rule:

- The downstream call must be tied to an instream flow station.
- Call data are specified as a time series in a file named “Downstream_Call (*.cal)” (see Section 4.1 Response Data). Note for a monthly model the call on day 1 is used to estimate the call for that month.
- The amount of water controlled by a downstream call is the minimum of its instream flow water right, its demand, and the available flow in the river when it is called. If the user wants to

control the entire flow below a downstream call structure a large decreed amount and demand should be specified.

- For a free river the downstream call's administration number should be entered as the most junior water right in the basin (e.g. 999999).

- The downstream calls administration number specified in the operation right file should be the most junior in the basin. This ensures it is not called as an operating rule prior to a consumptive (diversion, well, reservoir) water right.

- If the quantity of water associated with a downstream call is known then it is recommended the user model it as a standard instream flow (see Section 4.7).

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri            Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number (enter the most
                                    junior in the basin (e.g. 999999))
1-4            dumx              Monthly Switch
                                    0 No monthly on/off values
                                    12 Number of monthly on/off
                                       Switches provided
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n=Begin in year n
                                    -n=Stop after year n

Destination Data
1-6            ciopde            Instream flow station
1-7            iopdes(2,1)       1 (not used)

Source Data
1-8            ciopso(1)         NA (not used)
1-9            iopsou(2,1)       1 (not used)
1-10           ciopso(2)         0 (not used)
1-11           iopsou(4,1)       0 (not used)

Type Data
1-12           ityopr(1)         23

Associated Plan Data
1-13           creuse            NA

Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0

Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation
```

```
End Date
1-18          IoEnd              Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1           imonsw(1)          Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file
```

4.13.24 Direct Flow Exchange Direct (ityopr=24)

The type 24 operating rule allows a direct flow diversion's water right (ciopso(1)) to be exchanged to another direct flow structure, reservoir or plan (ciopde). The exchange can occur from the river or by a carrier. The amount diverted can be limited to the amount available (Diversion) or its CU (Depletion). The following comments are provided to assist in using and interpreting this operating rule:

- This operating rule controls both the source and exchanged (destination) diversion or storage. Any shortages at the source location are shared with the destination based on ownership of each.

- The **percent ownership** can be supplied that limits the exchange of the source water right.

- The **consumptive use** of the supply data can be specified to limit the exchange. The efficiency of water use for the exchanged water is set in the plan (*.pln) file. It may be set to a fixed efficiency for all months, a constant value for each of 12 months or to the efficiency of the source water right structure.

- The **source water right** may be transferred to a diversion, reservoir or plan (ciopde). When the destination is a plan, the user is typically trying to 1. Satisfy a T&C Plan obligation or 2. Temporarily store the water in an Accounting Plan.

- **Because a direct flow exchange right may be used to serve both a direct flow right and as a direct flow exchange right, the administration number assigned to the operating rule is used in the analysis for both the direct flow and the direct flow exchange (i.e. it is not overridden by the source water rights administration number).**

- Direct flow exchange may be controlled over a season by using the monthly on/off switch (imonsw(im)). Note the monthly on/off switches only control the exchange operation (i.e. the source water right continues to operate independent of the monthly on/off switch).

- **Monthly and Annual exchange limits are required as input.**

- The **exchange amount** is the minimum physical water available, remaining decree of the exchanging right (e.g. some of the decree may have been used for direct diversion purposes), the exchange potential between the destination and exchange locations, the monthly and annual exchange limits and the destination structure's capacity.

- **Carrier losses** associated with intervening structures may be provided if variable OprLoss is > 0 or = -1 and the variable dumx = 1-10 or < -12. Note carrier losses are routed back to the system using the return flow parameters associated with the carrier structure.

- **Terms and Conditions** (T&C Plans) may be calculated if the source 2 variable (ciopso2) is set to a T&C plan. The variable iousou(4,1) is used to indicate how and when T&C demands are calculated.

    - When ciopso2 = Plan ID and iopsou(4,1)=-1 the destination must be an accounting plan and the T&C Obligation is calculated when water is released from that Accounting plan using a type 27 or 28 rule.

    - When ciopso2 = Plan ID and iopsou(4,1)=1 a standard return pattern is used to calculate the T&C Obligation. A **Standard Return Pattern** calculates the T&C Obligation to be:

        1. T&C Obligation (standard) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) * (1.0-CU Factor)), where the CU Factor is provided in row 5. The first value in a standard return flow table corresponds to the month diverted, the second to the month after a diversion, etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s) is provided in the plan Return File (*.prf).

    - When ciopso2 = Plan ID and iopsou(4,1)=2 a fixed return pattern is used to calculate the T&C Obligation. A **Fixed Return Pattern** calculates the T&C Obligation to be:

        1. T&C Obligation (fixed) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) The first value in a fixed return flow table corresponds to the first month in the simulation (e.g. January for a calendar year simulation), the second month to February (again for a calendar year simulation), etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s) is provided in the plan Return File (*.prf).

    - When ciopso2 = Plan ID and iopsou(4,1)=3 a mixed return pattern is used to calculate the T&C Obligation. **Mixed Return Pattern** contains both a Standard and Fixed component and calculates the T&C Obligation to be:

        1. T&C Obligation (standard) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) * (1.0-CU Factor)), where the CU Factor is provided in row 5. The first value in a standard return flow table corresponds to the month diverted, the second to the month after a diversion, etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s) is provided in the plan Return File (*.prf).

        2. T&C Obligation (fixed) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) The first value in a fixed return flow table corresponds to the first month in the simulation (e.g. January for a calendar year simulation), the second month to February (again for a calendar year simulation), etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s) is provided in the plan Return File (*.prf).

    - When ciopso2 = Plan ID and iopsou(4,1)=4 a default return pattern is used to calculate the T&C Obligation. A **Default Return Pattern** has a standard component that uses historic return flow data associated with the source water right to calculate the T&C Obligation.

- If the variable ciopso2 is set to a T&C Plan ID and iopsou(4,1) is greater than zero then CU Factors are expected to be provided in card 5. Note the CU Factors typically represent negotiated values to, but not necessarily the same as, the efficiency of the Transfer From Structure. Also these factors are only used when iopsou(4,1) = 1 (Standard Return) or 3 (Mixed Return) even though they are required as input.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri            Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly and Intervening Structure Switch
                                    +n Number of intervening structures
                                       (max = 10)
                                    12 Monthly (12) on/off values
                                    -n Include -12 monthly on/off
                                       values minus n intervening
                                       structures
                                       Note, when a negative value is,
                                       provided, it should be -13 or
                                       less for 12 monthly values and
                                       one intervening structure
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n=Begin in year n
                                    -n=Stop after year n

Destination Data
1-6            ciopde            Destination structure (Diversion ID,
                                    Reservoir ID or Plan ID)
1-7            iopdes(2,1)       Destination account
                                 For a diversion destination, enter 1
                                 For a plan destination, enter 1
                                 For a reservoir destination, enter the account

Source Data
1-8            ciopso(1)         Source water right ID
1-9            iopsou(2,1)       Percent of source water right to
                                   exchange
1-10           ciopso(2)         T&C Plan ID
                                 Enter NA if none or
                                 If the destination is an
                                    Accounting Plan and the
                                    terms and conditions associated
                                    with this transfer will be
                                    calculated when water is released
1-11           iopsou(4,1)       0 if ciopso(2) = NA
                                 1 for a standard return pattern
                                 2 for a fixed annual return pattern
                                 3 for a mixed return pattern
                                 4 for a default (source) return pattern
                                 -1 the terms and conditions associated
                                    with this transfer will be
```

calculated when water is released

Type Data

1-12	ityopr(1)	24

Associated Plan Data

1-13	creuse	Reuse Plan ID (enter NA if none)

Diversion Type

1-14	cdivtyp	Diversion or Depletion

Conveyance Loss (%)

1-15	OprLoss	0 No Transit loss

Miscellaneous Limits

1-16	OprLimit	0

Start Date

1-17	IoBeg	First year of operation

End Date

1-18	IoEnd	Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12

2-1	imonsw(1)	Monthly switch 0=off, 1=on +n Day first used that month -n Day last used that month Note the first entry corresponds to the first month specified in the control file

Intervening Structure Data without loss
Include only if OprLoss = 0 and the monthly switch (dumx) = 1-10 or < -12
Format (36x, 10a12)

3-1	intern(1,1)	For +dumx, Enter dumx intervening structure ID's For -dumx, Enter abs(dumx)-12 intervening structure ID's

Intervening Structure Data with loss
Include only if OprLoss > 0 or = -1 and the monthly switch (dumx) = 1-10 or < -12
See Section 7.39 for the approach used to model an augmentation station (e.g. a structure that carries a diversion, typically with loss, then returns non-lost water to the river).
Free Format

3b-1	intern(1,1)	Intervening structure ID (e.g. a Diversion ID or Stream ID)
3b-2	OprLossC(l,1)	Carrier Loss for Structure ID %
3b-3	InternT(1,1)	Intervening Structure Type Enter Carrier if it is a diversion structure located on the river Enter Return if it is a return location on the River Repeat for +dumx values

Exchange Limits (Monthly and Annual)
Free Format

4-1	OprMax(1,1-12)	Monthly exchange limit (af/mo)
4-13	OprMax(1,13)	Annual exchange limit (af/yr)

```
T&C CU Factors Data
Include only if ciopso(2)is a T&C Plan and iopsou(4,1) is >0
Note the data is only used when iopsou(4,1) is a standard
Return pattern (1) or a mixed return pattern(3).
Free Format
5-1          OprEff(1)        Efficiency in month 1
5-2          OprEff(2)        Efficiency in month 2

5-12         OprEff(12)       Efficiency in month 12
```

4.13.25 Direct Flow Bypass Direct (ityopr=25)

The type 25 operating rule allows a direct flow diversion's water right (ciopso(1)) to be bypassed to a direct flow structure, reservoir or plan (ciopde). The diversion can occur from the river or through a carrier. The amount diverted may be limited to the amount available (Diversion) or its CU (Depletion). The following comments are provided to assist in using and interpreting this operating rule:

- A water right may operate as both a standard direct flow right and as a bypass water right.
- The user can supply data that limits the bypass to a percent (ownership) of the water right.
- The user can supply data that limits the bypass to the consumptive use of their portion of the water right. The efficiency of water use is estimated to equal the efficiency of the source water right's structure.
- The source water right may be transferred to a diversion, reservoir or plan (ciopde). When the destination is a plan, the user is typically trying to satisfy a T&C Plan obligation generated by another operating rule with the source water right.
- The user can supply a "Reuse plan" (creuse) that allows consumptive use credits associated with the direct flow bypass to be stored. A "Reuse Plan" may not be assigned when the destination is a plan because it using the full transfer to offset a T&C requirement.
- **Because a direct flow bypass right may be used to serve both a direct flow right and as a direct flow bypass right, the administration number assigned to the operating rule is used in the analysis analysis for both the direct flow and the direct flow exchange (i.e. it is not overridden by the source water rights administration number).**
- Direct flow bypass operations may be controlled over a season by using appropriate demand data and/or the monthly on/off switch (imonsw(im)). Note the monthly on/off switches only control the bypass operation (i.e. the source water right continues to operate independent of the monthly on/off switch).
- **Monthly and Annual exchange limits are required as input.**
- The amount available for diversion is the minimum physical water available, remaining decree of the exchanging right (e.g. some of the decree may have been used for direct diversion purposes), the bypass potential between the destination and bypass location, and the destination structure's capacity and the destination structure's demand.

- **Carrier losses** associated with intervening structures may be provided if variable OprLoss is > 0 or = -1 and the variable dumx = 1-10 or < -12. Note carrier losses are routed back to the system using the return flow parameters associated with the carrier structure.

- Terms and Conditions (T&C Plans) may be calculated if the source 2 variable (ciopso2) is set to a T&C plan. The variable iousou(4,1) is used to indicate how and when T&C demands are calculated.

    - When ciopso2 = Plan ID and iopsou(4,1)=-1 the destination must be an accounting plan and the T&C Obligation is calculated when water is released from that Accounting plan using a type 27 or 28 rule.

    - When ciopso2 = Plan ID and iopsou(4,1)=1 a standard return pattern is used to calculate the T&C Obligation. A **Standard Return Pattern** calculates the T&C Obligation to be:

        1. T&C Obligation (standard) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) * (1.0-CU Factor)), where the CU Factor is provided in row 5. The first value in a standard return flow table corresponds to the month diverted, the second to the month after a diversion, etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s) is provided in the plan Return File (*.prf).

    - When ciopso2 = Plan ID and iopsou(4,1)=2 a fixed return pattern is used to calculate the T&C Obligation. A **Fixed Return Pattern** calculates the T&C Obligation to be:

        1. T&C Obligation (fixed) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) The first value in a fixed return flow table corresponds to the first month in the simulation (e.g. January for a calendar year simulation), the second month to February (again for a calendar year simulation), etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s) is provided in the plan Return File (*.prf).

    - When ciopso2 = Plan ID and iopsou(4,1)=3 a mixed return pattern is used to calculate the T&C Obligation. **Mixed Return Pattern** contains both a Standard and Fixed component and calculates the T&C Obligation to be:

        1. T&C Obligation (standard) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) * (1.0-CU Factor)), where the CU Factor is provided in row 5. The first value in a standard return flow table corresponds to the month diverted, the second to the month after a diversion, etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s) is provided in the plan Return File (*.prf).

        2. T&C Obligation (fixed) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) The first value in a fixed return flow table corresponds to the first month in the simulation (e.g. January for a calendar year simulation), the second month to February (again for a calendar year simulation), etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s)is provided in the plan Return File (*.prf).

    - When ciopso2 = Plan ID and iopsou(4,1)=4 a default return pattern is used to calculate the T&C Obligation. A **Default Return Pattern** has a standard component that uses historic return flow data associated with the source water right to calculate the T&C Obligation.

- If the variable ciopso2 is set to a T&C Plan ID and iopsou(4,1) is greater than zero then CU Factors are expected to be provided in card 5. Note the CU Factors typically represent negotiated values related to, but not necessarily the same as, the efficiency of the Transfer From Structure. Also these factors are only used when iopsou(4,1) = 1 (Standard Return) or 3 (Mixed Return) even though they are required as input.

```
Row-data        Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
                1x,a12, 1x,2f8.0, 2i8)
1-1             cidvri            Operational right ID
1-2             nameo(1)          Operational right name
1-3             rtem(1)           Administration number
1-4             dumx              Monthly and Intervening Structure
                                  Switch
                                     +n Number of intervening structures
                                        (max = 10)
                                     12 Monthly (12) on/off values
                                     -n Include -12 monthly on/off
                                        values minus n intervening
                                        structures
                                        Note, when a negative value is,
                                        provided, it should be -13 or
                                        less for 12 monthly values and
                                        one intervening structure
1-5             ioprsw(1)         Annual On/Off Switch
                                     0=off
                                     1=on
                                     +n=Begin in year n
                                     -n=Stop after year n

Destination Data
1-6             ciopde            Destination structure (Diversion ID
                                     Reservoir ID or Plan ID)
1-7             iopdes(2,1)       Destination structure account
                                  For a diversion destination, enter 1
                                  For a reservoir destination, enter
                                     +n Account to be served by this right
                                     -n Fill the first n accounts based on
                                        the ratio of their ownership

Source Data
1-8             ciopso(1)         Source water right ID
1-9             iopsou(2,1)       Percent of source water right to be bypassed
1-10            ciopso(2)         T&C Plan ID Enter NA if none or
                                     if the destination is an Accounting
                                     Plan and the terms and conditions
                                     associated with this transfer will
                                     be calculated when water is
                                     released
1-11            iopsou(4,1)       0 if ciopso(2) = NA
                                  1 for a standard return pattern
                                  2 for a fixed return pattern
                                  3 for a mixed return pattern
                                  -1 the terms and conditions associated
                                     with this transfer will be
```

		calculated when water is released

Type Data

1-12	ityopr(1)	25

Associated Plan Data

1-13	creuse	Reuse Plan ID (enter NA if none)

Diversion Type

1-14	cdivtyp	Diversion or Depletion

Conveyance Loss (%)

1-15	OprLoss	0 No Transit loss

Miscellaneous Limits

1-16	OprLimit	0

Start Date

1-17	IoBeg	First year of operation

End Date

1-18	IoEnd	Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12

2-1	imonsw(1)	Monthly switch 0=off, 1=on +n Day first used that month -n Day last used that month Note the first entry corresponds to the first month specified in the control file

Intervening Structure Data without loss
Include only if OprLoss = 0 and the monthly switch (dumx) = 1-10 or < -12
Format (36x, 10a12)

3-1	intern(1,1)	For +dumx, Enter dumx intervening structure ID's For -dumx, Enter abs(dumx)-12 intervening structure ID's if < -12 enter abs(dumx)-12 intervening structure IDs

Intervening Structure Data with loss
Include only if OprLoss > 0 or = -1 and the monthly switch (dumx) = 1-10 or < -12
See Section 7.39 for the approach used to model an augmentation station (i.e. a structure that carries a diversion, typically with loss, then returns non-lost water to the river).
Free Format

3b-1	intern(1,1)	Intervening structure ID (e.g. a Diversion ID or Stream ID)
3b-2	OprLossC(l,1)	Carrier Loss for Structure ID %
3b-3	InternT(1,1)	Intervening Structure Type Enter Carrier if it is a diversion structure located on the river Enter Return if it is a return location on the River
		Repeat for +dumx values

Exchange Limits (Monthly and Annual)
Note: Must include 13 values

```
Free Format
4-1           OprMax(1,1-12)    Monthlyexchange limit (af/mo)
4-13          OprMax(1,13)      Annual exchange limit (af/yr)
```

T&C CU Factors

Include only if ciopso(2)is a T&C Plan and iopsou(4,1) is >0.

```
Free Format
5-1           OprEff(1)         Efficiency in month 1
5-2           OprEff(2)         Efficiency in month 2

5-12          OprEff(12)        Efficiency in month 12
```

4.13.26 Not currently used (ityopr=26)

The type 26 operating rule is not currently in use.

4.13.27 Reservoir or Reuse Plan or Accounting Plan to a Diversion or Reservoir or Carrier or Plan or Instream Flow with Reuse Direct (ityopr=27)

The type 27 operating rule provides a method to release water from a Reservoir or ReUse Plan (type 4 or 6) or Accounting Plan (11) or Out-of-Priority (OOP) Plan to a diversion or reservoir or instream flow or instream flow reach directly via the river or by a carrier. The following are noted:

- A "**ReUse Plan**" is a special structure type that can be used identify the location of a reusable water supply associated with a CU transfer, or transmountain import (see Section 7.23 for more details about plans).

- An "**Accounting Plan**" is a special structure type that can be used to identify the location of transferred water that might be used for a variety of demands (see Section 7.23 for more details about plans).

- An "**OOP Plan**" is a special structure type that is associated with a diversion or storage taken out-of-priority by a type 38 operating rule.

- If the source is a Reuse or Accounting Plan, the destination may be reusable (e.g. creuse is a reuse plan (type 3, 4, 5 or 6)).

- If the source is a reservoir, the source data may be tied to an Out-of-Priority Plan (e.g. creuse is a OOP plan (type 9)).

- If carrier losses are calculated (OprLoss>0), the return flow pattern and return locations are those assigned to the SOURCE (CARRIER) structure in the diversion station file (*.dds) (e.g. if the source is a water right tied to structure X, then the return flow pattern and locations are those provided for structure X in the diversion station file (*.dds)).

- If the variable OprLimit is set to 0 no operating rule ID should be provided in row 4. In general, the variable OprLimit should be set to 0 if the release is not constrained to monthly and annual limits and the source structure is not a carrier to this operating rule.

- If the variable OprLimit is set to 1, the operating rule ID specified in row 4's monthly and annual limits **will be increased and limit** the amount released.

- If the variable OprLimit is set to 2, the operating rule ID specified in row 4's monthly and annual limits **will be decreased and limit** the amount released.

- If the variable OprLimit is set to 3, the operating rule ID specified in row 4 **will limit** a release to the amount diverted by the operating rule in row 4.

- If the variable copso2 is set to a T&C plan the terms and conditions associated with a prior water transfer are calculated when the water is used by this operating rule. T&C demands are calculated using efficiency data provided with this operating rule, return flow data provided with the plan file (*.pln). Specifically when the source 2 (ciopso(2)) is set to a T&C plan:

  - The efficiency data used to calculate the T&C obligation is expected in row 5.

  - Other T&C data associated with a T&C obligation (return flow location, percent and table) are provided in a plan return flow file (*.prf).

  - Both standard and fixed T&C (return patterns) can be provided. If the source 2 account (iopsou(4,k) is set to 1, the return flow pattern provided is treated as a standard return flow pattern. If the source 2 account (iopsou(4,k) is set to 2 the return flow pattern is treated as a fixed return flow pattern. Note a standard return pattern is independent of time; it extends from the current time step to the specified number of future time steps. For example a monthly model that diverts in June will estimate November return flows using data provided for return flow value 6 (6 months into the future). A fixed return pattern is time dependent; it estimates a monthly return based on a specified monthly return value. For example a monthly model that diverts in June will estimate November T&C requirements (return flows) using data provided for return flow value 11 (November). When a fixed return pattern is used any returns that may be assigned to a month prior to the time a diversion occurs are not included (e.g. an April obligation = 0 if the diversion occurs in June). Also the fixed return pattern is consistent with the year type modeled (e.g. return flow value 1 = January for a calendar year analysis, 1 = October for a water year analysis,and 1 = November for an irrigation year analysis).

- An **Augmentation Structure** (i.e. a structure that carries a diversion, typically with loss, then returns non-lost water to the river for subsequent diversion) can be modeled as follows:

  - Variable dumx should be set so that at least two structures will be provided in row 3b.

  - The first carrier should be the Structure ID that diverts water from the stream and has an intervening structure type = Carrier.

  - The second carrier should be a station on the river that has an intervening structure type = Return.

  - Note that conveyance losses can be specified for a intervening structure type = Carrier but not an intervening structure type = Return. This limitation allows losses to be routed to the system using the return flow properties of the carrier structure.

  - If water that returns to the river is subsequently rediverted into another carrier at least three entries should be provided sequentially as follows; 1. An intervening structure with type = Carrier, 2. An intervening structure with type = Return, and 3. An intervening structure with type = Carrier.

- A maximum of 10 intervening structures (intervening types = Carrier or Return) can be provided.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly Intervening Structure Switch
                                    +n Number of intervening structures
                                       (max = 10)
                                    12 Monthly (12) on/off values
                                    -n Include -12 monthly on/off
                                       values minus n intervening
                                       structures
                                       Note, when a negative value is,
                                       provided, it should be -13 or
                                       less for 12 monthly values and
                                       one intervening structure
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
                                    -n Stop after year n

Destination Data
1-6            ciopde            Destination structure (diversion
                                    or reservoir or instream flow or
                                    T&C (type 1), Augmentation
                                    Plan (type 2) or Accounting Plan
                                    (type 11)
1-7            iopdes(2,1)       Destination structure account
                                 For a diversion or plan or instream
                                    flow destination enter 1
                                 For a reservoir destination, enter
                                    +n Account to be served by this
                                       right
                                    -n Fill the first n accounts based
                                       On the ratio of their ownership

Supply Data
1-8            ciopso(1)         ReUse Plan or Accounting Plan or
                                 Reservoir
1-9            iopsou(2,1)       If ciopso(1) is a plan
                                    enter the ownership %
                                 If ciopso(1) is a reservoir
                                    enter the account #
1-10           ciopso(2)         T&C Plan ID (enter NA if none)
1-11           iopsou(4,1)       0 if ciopso(2) = NA
                                 1 for a standard return pattern
                                 2 for a fixed return pattern
                                 3 for a mixed (standard and fixed)
                                    return pattern

Type Data
```

1-12 ityopr(1) 27

Associated Plan Data

1-13 creuse If the source is a Reuse Plan ID
enter Reuse Plan ID or NA if none
If the source is a Reservoir
enter the associated Reuse Plan or
OOP Plan ID

Diversion Type

1-14 cdivtyp Diversion or Depletion
If the destination is a reservoir
set to Diversion

Conveyance Loss (%)

1-15 OprLoss 0 No Transit loss

Miscellaneous Limits

1-16 OprLimit 0 Do not adjust Monthly or Annual
Operational limits. Also **do not**
recognize the capacity of the
structure associated with the
operational rule in row 4 is
already adjusted.
1 **Increase monthly and Annual**
Diversion limits of the operational
Rule specified in row 4. Also **do** **recognize**
the capacity of the structure associated with
the operational rule in row 4 is already
adjusted.
2 **Decrease monthly and annual releases**
limits of the operational rule
specified in row 4. Also **do** **recognize** the
capacity of the
structure associated with the
operational rule in row 4 is already
adjusted.
3 Limit the amount released by the
amount diverted by the operational rule in
row 4.

Start Date

1-17 IoBeg First year of operation

End Date

1-18 IoEnd Last year of operation

Monthly Data

Free Format

Include only if the monthly switch (dumx) = 12 or less than -12

2-1 imonsw(1) Monthly switch 0=off, 1=on
+n Day first used that month
-n Day last used that month
Note the first entry corresponds to the first
month specified in the control file

Intervening Structure Data without loss

Include only if OprLoss = 0 and the monthly switch (dumx) = 1-10 or < -12

Format (36x, 10a12)

3a-1 intern(1,1) For +dumx, Enter dumx intervening

```
                                   structure ID's
                                For -dumx, Enter abs(dumx)-12
                                   intervening structure ID's
```

Intervening Structure Data with loss
Include only if OprLoss > 0 or = -1 and the monthly switch (dumx) = 1-10 or < -12
See Section 7.39 for the approach used to model an augmentation station (e.g. a structure that carries a diversion, typically with loss, then returns non-lost water to the river).

```
Free Format
3b-1           intern(1,1)       Intervening structure ID
                                   (e.g. a Diversion ID or Stream ID)
3b-2           OprLossC(l,1)     Carrier Loss for Structure ID %
3b-3           InternT(1,1)      Intervening Structure Type
                                 Enter Carrier if it is a diversion
                                   structure located on the river
                                 Enter Return if it is a return
                                   location on the River

                                 Repeat for +dumx values
```

Associated Operating Rule
Include only if the switch (OprLimit) > 0

```
Free Format
4-1            cx                If OprLimit=1, Operating Rule ID
                                   for which monthly and Annual limits
                                   will be INCREASED by the Amount
                                   released
                                 If OprLimit=2, Operating Rule ID
                                   for which monthly and Annual limits
                                   will LIMIT the Amount released
                                 If OprLimit=3, Operating Rule ID
                                   for which diversions by that rule
                                   will LIMIT the Amount released
```

T&C CU Factors
Include only if ciopso(2)is a T&C Plan and iopsou(4,1) is >0.

```
Free Format
5-1            OprEff(1)         Efficiency in month 1
5-2            OprEff(2)         Efficiency in month 2

5-12           OprEff(12)        Efficiency in month 12
```

4.13.28 Reservoir or Reuse or Accounting Plan to a User by Exchange (ityopr=28)

The type 28 operating rule provides a method to release water from a Reservoir, ReUse Plan, Accounting Plan or Out-of-Priority (OOP) Plan to a diversion, reservoir, instream flow, or carrier by exchange. In addition, it can be used to release water to an instream flow node or reach. The following are noted:

- A “ReUse Plan” is a special structure type that can be used identify the location of a reusable water supply associated with a CU transfer, or transmountain import (see Section 7.23 for more details about plans).

- An "Accounting Plan" is a special structure type that can be used to identify the location of transferred water that might be used for a variety of demands (see Section 7.23 for more details about plans).

- An "OOP Plan" is a special structure type that is associated with a diversion or storage taken out-of-priority by a type 38 operating rule.

- If the source is a Reuse or Accounting Plan, the destination may be reusable (i.e. creuse is a reuse plan (type 3, 4, 5 or 6)).

- If the source is a reservoir, the source data may be tied to an out-of-priority Plan (i.e. creuse is an OOP plan (type 9)).

- If carrier losses are calculated (OprLoss>0), the return flow pattern and return locations are those assigned to the SOURCE (CARRIER) structure in the diversion station file (*.dds) (e.g. if the source is a water right tied to structure X, then the return flow pattern and locations are those provided for structure X in the diversion station file (*.dds)).

- If the variable OprLimit is set to 0 no operating rule ID should be provided in row 4. In general, the variable OprLimit should be set to 0 if the release is not constrained to monthly and annual limits and the source structure is not a carrier to this operating rule.

- If the variable OprLimit is set to 1 the operating rule ID specified in row 4's monthly and annual limits **will be increased and limit** the amount rleased. Also because the capacity of the source structure of the operating rule ID specified in row 4 has already been adjusted the source structure's capacity will not limit the amount diverted.

- If the variable OprLimit is set to 2 the operating rule ID specified in row 4's monthly and annual limits **will be decreased and limit** the amount release. Also because the capacity of the source structure of the operating rule ID specified in row 4 has already been adjusted the source structure's capacity will not limit the amount diverted.

- If the variable OprLimit is set to 3 the operating rule ID specified in row 4 **will limit** a release to the amount diverted by the operating rule specified in row 4.

- If the source 2 variable (ciopso2) is set to a T&C plan the terms and conditions associated with a prior water transfer are calculated when the water is used by this operating rule. The variable iousou(4,1) is used to indicate how T&C demands are calculated.

    - When ciopso2 = Plan ID and iopsou(4,1)=1 a standard return pattern is used to calculate the T&C Obligation. A **Standard Return Pattern** calculates the T&C Obligation to be:

        1. T&C Obligation (standard) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) * (1.0-CU Factor)), where the CU Factor is provided in row 5. The first value in a standard return flow table corresponds to the month diverted, the second to the month after a diversion, etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s) is provided in the plan Return File (*.prf).

    - When ciopso2 = Plan ID and iopsou(4,1)=2 a fixed return pattern is used to calculate the T&C Obligation. A **Fixed Return Pattern** calculates the T&C Obligation to be:

1. T&C Obligation (fixed) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) The first value in a fixed return flow table corresponds to the first month in the simulation (e.g. January for a calendar year simulation), the second month to February (again for a calendar year simulation), etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s) is provided in the plan Return File (*.prf).

- When ciopso2 = Plan ID and iopsou(4,1)=3 a mixed return pattern is used to calculate the T&C Obligation. **Mixed Return Pattern** contains both a Standard and Fixed component and calculates the T&C Obligation to be:

    1. T&C Obligation (standard) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) * (1.0-CU Factor)), where the CU Factor is provided in row 5. The first value in a standard return flow table corresponds to the month diverted, the second to the month after a diversion, etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s)is provided in the plan Return File (*.prf).

    2. T&C Obligation (fixed) = (Data in the return flow file (e.g. *.urm)) * ((Released Water) The first value in a fixed return flow table corresponds to the first month in the simulation (e.g. January for a calendar year simulation), the second month to February (again for a calendar year simulation), etc. Data that associates a Plan ID with any number of Return Flow Location(s), Percent(s), and Return Table ID(s) is provided in the plan Return File (*.prf).

- When ciopso2 = Plan ID and iopsou(4,1)=4 a default return pattern is used to calculate the T&C Obligation. A **Default Return Pattern** has a standard component that uses historic return flow data associated with the source water right to calculate the T&C Obligation.

- If the variable Ciopso2 is set to a T&C Plan ID and iopsou(4,1) is greater than zero then CU Factors are expected to be provided in row 5. Note the CU Factors typically represent negotiated valued related to, but not necessarily the same as, the efficiency of the Transfer From Structure. Also these factors are only used when iopsou(4,1) = 1 (Standard Return) or 3 (Mixed Return) even though they are required as input.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly Intervening Structure Switch
                                    +n Number of intervening structures
                                       (max = 10)
                                    12 Monthly (12) on/off values
                                    -n Include -12 monthly on/off
                                       values minus n intervening
                                       structures
                                       Note, when a negative value is,
                                       provided, it should be -13 or
                                       less for 12 monthly values and
                                       one intervening structure
```

1-5	ioprsw(1)	Annual On/Off Switch 0=off 1=on +n Begin in year n -n Stop after year n
Destination Data		
1-6	ciopde	Destination structure (diversion or reservoir or instream flow or plan)
1-7	iopdes(2,1)	Destination structure account For a diversion or plan or instream flow destination enter 1 For a reservoir destination, enter +n Account to be served by this right -n Fill the first n accounts based on the ratio of their ownership
Supply Data		
1-8	ciopso(1)	ReUse Plan or Accounting Plan or Reservoir
1-9	iopsou(2,1)	If ciopso(1) is a plan enter the ownership % If ciopso(1) is a reservoir enter the account #
1-10	ciopso(2)	T&C Plan ID (enter NA if none)
1-11	iopsou(4,1)	0 if ciopso(2) = NA 1 for a standard return pattern 2 for a fixed return pattern 3 for a mixed (standard and fixed) return pattern
Type Data		
1-12	ityopr(1)	28
Associated Plan Data		
1-13	creuse	Reuse Plan ID (enter NA if none)
Diversion Type		
1-14	cdivtyp	Diversion or Depletion If the destination is a reservoir set to Diversion
Conveyance Loss (%)		
1-15	OprLoss	0 No Transit loss
Miscellaneous Limits		
1-16	OprLimit	0 Do not adjust Monthly or Annual Operational limits. Also **do not recognize** the capacity of the structure associated with the operational rule in row 4 is already adjusted. 1 **Increase monthly and Annual Diversion limits** of the operational Rule specified in row 4. Also **do recognize** the capacity of the structure associated with the operational rule in row 4 is already adjusted. 2 **Decrease monthly and annual releases limits** of the operational rule

		specified in row 4. Also **do recognize** the capacity of the structure associated with the operational rule in row 4 is already adjusted.
		3 Limit the amount released by the amount diverted by the operational rule in row 4.

Start Date

1-17	IoBeg	First year of operation

End Date

1-18	IoEnd	Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12

2-1	imonsw(1)	Monthly switch 0=off, 1=on +n Day first used that month -n Day last used that month Note the first entry corresponds to the first month specified in the control file

Intervening Structure Data without loss
Include only if OprLoss = 0 and the monthly switch (dumx) = 1-10 or < -12
Format (36x, 10a12)

3a-1	intern(1,1)	For +dumx, Enter dumx intervening structure ID's For -dumx, Enter abs(dumx)-12 intervening structure ID's

Intervening Structure Data with loss
Include only if OprLoss > 0 or = -1 and the monthly switch (dumx) = 1-10 or < -12
See Section 7.39 for the approach used to model an augmentation station (e.g. a structure that carries a diversion, typically with loss, then returns non-lost water to the river).
Free Format

3b-1	intern(1,1)	Intervening structure ID (e.g. a Diversion ID or Stream ID)
3b-2	OprLossC(l,1)	Carrier Loss for Structure ID %
3b-3	InternT(1,1)	Intervening Structure Type Enter Carrier if it is a diversion structure located on the river Enter Return if it is a return location on the River Repeat for +dumx values

Associated Operating Rule
Include only if the switch (OprLimit) > 0
Free Format

4-1	cx	If OprLimit=1, Operating Rule ID for which monthly and Annual limits will be **INCREASED** by the Amount released If OprLimit=2, Operating Rule ID for which monthly and Annual limits will **LIMIT** the Amount released If OprLimit=3, Operating Rule ID for which diversions by that rule

```
                              will LIMIT the Amount released
```

T&C CU Factors
Include only if ciopso(2)is a T&C Plan and iopsou(4,1) > 0.
If iopsou(4,1) = 2 (fixed) or 4 (default) enter -1.0 since this data is not used.

```
Free Format
5-1            OprFac(1)          CU factor in month 1
5-2            OprFac(2)          CU factor in month 2
...                               ...       ...
5-12           OprFac(12)         CU factor in month 12

                                  Repeat for number of return flow locations
```

4.13.29 ReUse or Accounting Plan Spill (ityopr=29)

The type 29 operating rule provides a method to spill water from a Reuse Plan or Accounting Plan to the system. The following are noted:

- A "ReUse Plan" is a special structure type that can be used identify the location of a reusable water supply associated with a CU transfer, or transmountain import (see Section 7.23 for more details about plans).
- An "Accounting Plan" is a special structure type that can be used to identify the location of transferred water that might be used for a variety of demands (see Section 7.23 for more details about plans).
- If the reuse plan is tied to a reservoir (e.g. it is a plan type 3 or 5) then source 1 (ciopso(1)) should be a reservoir ID and source 2 (ciopso(2)) should be a Plan ID.
- If the reuse plan is not tied to a reservoir then source 1 (ciopso(1)) should be a plan ID and source 2 (ciopso(2)) should be NA.
- If the variable OprLimit is set to 1 the operating rule ID specified in row 4 will have its monthly and annual limits increased by the amount released.

Row-data   Variable   Description

Control Data

```
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri(1)          Operational right ID
1-2            nameo(1)           Operational right name
1-3            rtem(1)            Administration number
1-4            dumx               Monthly Switch
                                     0 No monthly on/off values
                                     12 Monthly on/off switches
1-5            ioprsw(1)          Annual On/Off Switch
                                     0=off
                                     1=on
                                     +n Begin in year n
                                     -n Stop after year n
```

Destination Data

```
1-6            ciopde             NA
1-7            iopdes(2,1)        0
```

```
Supply Data
1-8            ciopso(1)          Supply Reservoir ID or ReUse plan ID
1-9            iopsou(2,1)        Supply Reservoir account or ReUse
                                     Account (enter 0 if not applicable)
1-10           ciopso(2)          Supply Plan ID
                                  Enter NA if none
1-11           iopsou(4,1)        0

Type Data
1-12           ityopr(1)          29

Associated Plan Data
1-13           creuse             NA

Diversion Type
1-14           cdivtyp            NA

Conveyance Loss (%)
1-15           OprLoss            0

Miscellaneous Limits
1-16           OprLimit           0 Do not adjust Monthly or Annual
                                  Operational limits
                                     +n Adjust monthly and Annual limits
                                        of the operational rule
                                     specified in row 3 below
Start Date
1-17           IoBeg              First year of operation

End Date
1-18           IoEnd              Last year of operation


Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)          Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file


Monthly and Annual Limitation Data
Format (36x, 10a12)
Include only if the switch (OprLimit) = 1
3-1            cx                 Operating Rule ID for which monthly and annual
                                     limits will be increased by the amount
                                     spilled
```

4.13.30 Reservoir Re Diversion (ityopr=30)

The type 30 operating right allows a reservoir to re divert water released in the same time step to a T&C plan by another (type 26) operating rule. This operating rule is similar to a standard reservoir diversion except the amount diverted is limited to the amount released by a prior operating rule (ciopso1).This rule was developed and is commonly used because T&C releases are typically required to benefit other users before the system knows a release was unnecessary. Therefore, when implemented properly, the senior administration number of the T&C release (type 26) operates and makes water available to other water users. Then the junior reservoir re diversion (type 30) operates to try and re store this release if water is available (e.g. the release was not required).

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly Intervening Structure Switch
                                    +n Number of intervening structures
                                       (max = 10)
                                    12 Monthly (12) on/off values
                                    -n Include -12 monthly on/off
                                    values minus n intervening
                                    structures
                                    Note, when a negative value is,
                                    provided, it should be -13 or
                                    less for 12 monthly values and 1
                                    intervening structure)
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
                                    -n Stop after year n
Destination Data
1-6            ciopde            Destination reservoir
1-7            iopdes(2,1)       Destination account

Supply Data
1-8            ciopso(1)         Operating right ID associated with
                                    the release of water to a T&C plan
1-9            iopsou(2,1)       0
1-10           ciopso(2)         NA
1-11           iopsou(4,1)       0

Type Data
1-12           ityopr(1)         30

Associated Plan Data
1-13           creuse            NA

Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0.0

Miscellaneous Limits
1-16           OprLimit          0.0

Start Date
1-17           IoBeg             First year of operation

End Date
1-18           IoEnd             Last year of operation

Monthly Data
```

```
Free Format
```
Include only if the monthly switch (dumx) = 12 or less than -12

```
2-1             imonsw(1)          Monthly switch 0=off, 1=on
                                      +n Day first used that month
                                      -n Day last used that month
                                   Note the first entry corresponds to the first
                                      month specified in the control file
```

Intervening Structure Data without loss

Include only if the monthly switch (dumx) = 1-10 or < -12

```
Format (36x, 10a12)

3-1             intern(1,1)        For +dumx, Enter dumx intervening
                                      structure IDs
                                   For -dumx, Enter abs(dumx)-12
                                      intervening structure IDs
```

4.13.31 Carrier Right with Reuse (ityopr=31)

The type 31 operating rule provides a method to divert water to a reservoir or direct flow structure using another structure's water rights. It is similar to the type 11 operating rule except it tracks reusable water associated with the diverted water's return flows. Water may be diverted to a reservoir or direct flow structure using a carrier structure's water rights. In addition, it can be used to constrain a diversion to the capacity of up to 10 intervening structures.

Note a diversion is implicitly constrained by the capacity of the destination structure (variable ciopde 1-6). Also, if several operating rules use the same water right, diversions are not allowed to exceed the decreed capacity. Finally if the destination is a reservoir, the operating rule demand is the destination reservoir's capacity. If the destination is a diversion, the demand is the destination structure's demand.

Row-data   Variable   Description

Control Data

```
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
                1x,a12, 1x,2f8.0, 2i8)
1-1             cidvri             Operational right ID
1-2             nameo(1)           Operational right name
1-3             rtem(1)            Administration number. Note if
                                      ciopso(1) is a diversion right, its
                                      administration number is used and
                                      rtem is ignored
1-4             dumx               Monthly and Structure Switch
                                      +n Number of intervening structures
                                         (max = 10)
                                      -n Include -12 for monthly on/off values
                                         minus n intervening structures.
                                         Note, when a negative value is,
                                         provided, it should be -13 or less)
1-5             ioprsw(1)          Annual On/Off Switch
                                      0 off
                                      1 on
                                      +n Begin in year n
                                      -n=Stop after year n
```

Destination Data

```
1-6             ciopde             Destination diversion ID or reservoir ID
```

```
1-7             iopdes(2,1)       Destination structure account
                                  For a diversion destination, enter 1
                                  For a reservoir destination, enter
                                     +n Account to be served by this right
                                     -n Fill the first n accounts based on
                                        the ratio of their ownership
```

Source Data

```
1-8             ciopso(1)         Diversion Water right ID
1-9             iopsou(2,1)       0
1-10            ciopso(2)         NA
1-11            iopsou(4,1)       0
```

Type Data

```
1-12            ityopr(1)         31
```

Associated Plan Data

```
1-13            creuse            Reuse Plan ID (enter NA if none)
```

Diversion Type

```
1-14            cdivtyp           NA
```

Conveyance Loss (%)

```
1-15            OprLoss           0
```

Miscellaneous Limits

```
1-16            OprLimit          0
```

Start Date

```
1-17            IoBeg             First year of operation
```

End Date

```
1-18            IoEnd             Last year of operation
```

Monthly Data

Free Format

Include only if the monthly switch (dumx) = 12 or less than -12

```
2-1             imonsw(1)         Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file
```

Intervening Structure Data without loss

Include only if the monthly switch (dumx) = 1-10 or < -12

Format (36x, 10a12)

```
3-1             intern(1,1)       For +dumx, Enter dumx intervening
                                     structure ID's
                                  For -dumx, Enter abs(dumx)-12
                                     intervening structure type 27
ID's
```

4.13.32 Reservoir with a Reservoir Reuse Plantyp to a User Direct (ityopr=32)

The type 32 operating rule provides a method to release water from a reservoir with a reservoir reuse plan (type 3 or 5) to a reservoir, direct flow, instream flow node or instream flow reach located downstream of the reservoir. If the delivery method is a release from the reservoir directly to a demand or reservoir (i.e. no release to the river) the diversion type (cdivtyp) should be set to Direct. If the delivery method is the river and the delivery is intended to meet the destination's demand the diversion type (cdivtyp) should be set to Diversion. If the destination is a diversion and the delivery is intended to meet the consumption associated with the destination's demand, the diversion type (cdivtyp) should be set to Depletion. In addition, carriers can be used to constrain a release to the capacity of up to 10 intervening structures or carriers. Note a diversion is implicitly constrained by the capacity of the destination structure (variable ciopde).

```
Row-data        Variable           Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri(1)          Operational right ID
1-2            nameo(1)           Operation right name
1-3            rtem(1)            Administration number
1-4            dumx               Monthly and Intervening Structure Switch
                                     +n Number of intervening structures
                                        (max = 10)
                                     -n Include -12 monthly on/off
                                        values minus n intervening
                                        structures
                                        Note, when a negative value is,
                                        provided, it should be -13 or
                                        less for 12 monthly values and
                                     one intervening structure
1-5            ioprsw(1)          Annual On/Off Switch
                                     0 off
                                     1 on
                                     +n Begin in year n
                                     -n Stop after year n

Destination Data
1-6            ciopde             Destination diversion ID or reservoir
                                  ID or Instream flow ID
1-7            iopdes(2,1)        Destination structure account
                                  For a diversion or instream flow
                                     destination, enter 1
                                  For a reservoir destination, enter
                                     +n Account to be served by this right
                                     -n Fill the first n accounts based on
                                        the ratio of their ownership

Supply Data
1-8            ciopso(1)          Supply reservoir ID
1-9            iopsou(2,1)        Supply reservoir account
1-10           ciopso(2)          Supply Reservoir Reuse Plan ID at Source
1-11           iopsou(4,1)
                                  See Section 7.15 for a discussion of the
                                  Reservoir demand options.
                                     0 = Reservoir demand is not
                                         adjusted
                                     +n = Reservoir demand is limited to not
                                          exceed CIR/n; where n (%) is
                                          the efficiency of reservoir
                                          water use that is limited to
                                          not exceed the max system
                                          efficiency
                                          Note a +n requires the
                                          variable efficiency option
```

```
                                                (ieffmax) from control file be
                                                on
```

Type Data

```
1-12            ityopr(1)         32
```

Associated Plan Data

```
1-13            creuse            Reuse Plan ID for returns (enter NA if none)
```

Diversion Type

```
1-14            cdivtyp           Diversion or Depletion or Direct
```

Conveyance Loss (%)

```
1-15            OprLoss           0
```

Miscellaneous Limits

```
1-16            OprLimit          0
```

Start Date

```
1-17            IoBeg             First year of operation
```

End Date

```
1-18            IoEnd             Last year of operation
```

Monthly Data

Free Format

Include only if the monthly switch (dumx) = 12 or less than -12

```
2-1             imonsw(1)         Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file
```

Intervening Structure Data without loss

Include only if the monthly switch (dumx) = 1-10 or < -12

Format (36x, 10a12)

```
3-1             intern(1,1)       For +dumx, Enter dumx intervening
                                     structure ID's
                                  For -dumx, Enter abs(dumx)-12
                                     intervening structure ID's
```

4.13.33 Reservoir with a Reuse Plan to a User by Exchange (ityopr=33)

The type 33 operating rule provides a method to release water from a Reservoir with a Reservoir Reuse plan (type 3 or 5) to a reservoir, direct flow, instream flow or a carrier located upstream of the reservoir, by exchange when the receiving structures return flows can be reused. The amount released may equal the destinations demand (Diversion) or consumption (Depletion). In addition, it can be used to constrain a diversion to the capacity of up to 10 intervening structures or carriers. Note a diversion is implicitly constrained by the capacity of the destination structure (variable ciopde, row-data 1-6).

Row-data	**Variable**	**Description**

Control Data

```
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
                1x,a12, 1x,2f8.0, 2i8)
1-1             cidvri(1)         Operational right ID
```

1-2	nameo(1)	Operation right name
1-3	rtem(1)	Administration number
1-4	dumx	Monthly and Intervening Structure Switch +n Number of intervening structures (max = 10) -n Include -12 monthly on/off values minus n intervening structures Note, when a negative value is provided, it should be -13 or less for 12 monthly values and one intervening structure
1-5	ioprsw(1)	Annual On/Off Switch 0 off 1 on +n Begin in year n -n Stop after year n

Destination Data

1-6	ciopde	Destination diversion ID or reservoir ID or Instream Flow node or reach
1-7	iopdes(2,1)	Destination structure account For a diversion destination, enter 1 For a ISF destination, enter 1 For a reservoir destination, enter +n Account to be served by this right -n Fill the first n accounts based on the ratio of their ownership

Supply Data

1-8	ciopso(1)	Supply reservoir ID
1-9	iopsou(2,1)	Supply reservoir account
1-10	ciopso(2)	Supply Reservoir Reuse Plan ID
1-11	iopsou(4,1)	***See Section 7.15 for a discussion of the Reservoir demand options.*** 0 = reservoir demand is not adjusted +n = Reservoir demand is limited to not exceed CIR/n; where n (%) is the efficiency of reservoir water use that is limited to not exceed the max system efficiency Note a +n requires the variable efficiency option (ieffmax) from control file be on

Type Data

1-12	ityopr(1)	33

Associated Plan Data

1-13	creuse	Reuse Plan ID for returns (enter NA if none)

Diversion Type

1-14	cdivtyp	Diversion or Depletion

Conveyance Loss (%)

1-15	OprLoss	0

Miscellaneous Limits

```
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation

End Date
1-18           IoEnd             Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file

Intervening Structure Data without loss
Include only if the monthly switch (dumx) = 1-10 or < -12
Format (36x, 10a12)
3-1            intern(1,1)       For +dumx, Enter dumx intervening
                                    structure ID's
                                 For -dumx, Enter abs(dumx)-12
                                    intervening structure ID's
```

4.13.34 Reservoir to Reservoir Transfer (Bookover) with a Plan (ityopr=34)

The type 34 operating rule allows a reservoir to reservoir transfer (bookover) to occur where the destination water may be reusable or increase an OOP plan obligation. It is commonly used to transfer water from one reservoir storage account to another in a particular month. The following are noted:

- The destination reservoir may be the same or different than the source reservoir. If they are different the destination reservoir must be located downstream of the source reservoir.
- If the delivery method is a release from the reservoir directly to a demand or reservoir (i.e. no release to the river) the diversion type (cdivtyp) should be set to Direct. If the delivery method is the river and the delivery is intended to meet the destination's demand the diversion type (cdivtyp) should be set to Diversion.
- The amount transferred can be limited to the amount of water diverted by another operating rule (specified under variable ciopso(2)).
- The amount transferred can be limited to the demand of a diversion structure (specified in field ciopso(2)).
- The amount transferred can be limited to the volume of water in an Out-of-Priority (OOP) plan (specified in field ciopso(2)).
- The amount transferred can be booked from one reservoir to another by a carrier (pipeline).
- If the variable OprLimit is set to 1 the operating rule ID specified in row 4's monthly and annual limits **will be increased and limit** the amount rleased. Also because the capacity of the source structure of the operating rule ID specified in row 4 has already been adjusted the source structure's capacity will not limit the amount diverted.

- If water is being transferred from an OOP plan in one reservoir to an OOP plan in another reservoir then:
    - Source 1 should be the source reservoir
    - Source 2 should be the OOP plan at the source reservoir
    - The destination should be the reservoir receiving the bookover
    - The plan data should be the OOP plan at the destination reservoir

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly and Structure Switch
                                    0 No monthly on/off values
                                    12 Number of monthly on/off
                                       Switches provided
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n Begin in year n
                                    -n Stop after year n

Destination Data
1-6            ciopde            Destination reservoir ID
1-7            iopdes(2,1)       Destination structure account
                                 For a reservoir destination, enter
                                    +n Account to be served by this right
                                    -n Fill the first n accounts based on
                                       the ratio of their ownership

Supply Data
1-8            ciopso(1)         Supply reservoir ID
1-9            iopsou(2,1)       Supply reservoir account

1-10           ciopso(2)         Transfer Limit
                                 If not required enter 0
                                 If limited by the amount diverted under
                                    an operating rule, enter the operating
                                    Rule ID.
                                 If limited by a diversion demand amount
                                    enter the diversion structure ID.
                                 If limited by an OOP Plan amount
                                    enter the OOP Plan ID.
1-11           iopsou(4,1)       Enter 0 (Not Used)

Type Data
1-12           ityopr(1)         34

Plan Data
1-13           creuse            Reuse Plan ID or OOP Plan ID

Diversion Type
1-14           cdivtyp           Diversion or Direct
```

Conveyance Loss (%)

```
1-15            OprLoss             0
```

Miscellaneous Limits

```
1-16            OprLimit            0 Do not adjust Monthly or Annual
                                       Operational limits
                                    1 Increase monthly and Annual
                                       Diversion limits of the operational
                                       Rule specified in row 4. Also do    recognize
                                    the capacity of the  structure associated with
                                    the   operational rule in row 4 is     already
                                    adjusted.
```

Start Date

```
1-17            IoBeg               First year of operation
```

End Date

```
1-18            IoEnd               Last year of operation
```

Monthly Data

Free Format

Include only if the monthly switch (dumx) = 12 or less than -12

```
2-1             imonsw(1)           Monthly switch 0=off, 1=on
                                       +n Day first used that month
                                       -n Day last used that month
                                    Note the first entry corresponds to the first
                                       month specified in the control file
```

Associated Operating Rule

Include only if the switch (OprLimit) =2 or 3

Free Format

```
3-1             cx                  If Oprlimit=2, Operating Rule ID
                                      for which monthly and Annual
                                      limits will LIMIT the
                                      amount released
                                    If OprLimit=3, Operating Rule ID
                                       for which diversions by that rule
                                       will LIMIT the Amount released
```

Intervening Structure Data without loss

Include only if the monthly switch (dumx) = 1-10 or < -12

Format (36x, 10a12)

```
4a-1            intern(1,1)         For +dumx, Enter dumx intervening
                                       structure ID's
                                    For -dumx, Enter abs(dumx)-12
                                       intervening structure ID's
```

4.13.35 Import to a Diversion or Reservoir or Carrier with or without Reuse (ityopr=35)

The type 35 operating rule provides a method to import water from outside the system to a reservoir, direct flow structure or a carrier. The imported water may be reused if the variable creuse is set to a reuse plan. In addition, this operating rule can be used to constrain a diversion to the capacity of up to 10 intervening structures or carriers. Note that an import structure should be specified with the same ID in both the diversion station file (*.dds) and plan file (*.pln). Finally monthly import values should be specified as negative demands in the diversion demand file (*.ddm).

Row-data	Variable	Description
Control Data		
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12, 1x,a12, 1x,2f8.0, 2i8)		
1-1	cidvri(1)	Operational right ID
1-2	nameo(1)	Operation right name
1-3	rtem(1)	Administration number
1-4	dumx	Monthly and Intervening Structure Switch +n Number of intervening structures (max = 10) -n Include -12 monthly on/off values minus n intervening structures Note, when a negative value is, provided, it should be -13 or less for 12 monthly values and one intervening structure
1-5	ioprsw(1)	Annual On/Off Switch 0 off 1 on +n Begin in year n -n Stop after year n
Destination Data		
1-6	ciopde	Destination diversion ID or reservoir ID or carrier ID
1-7	iopdes(2,1)	Destination structure account For a diversion destination, enter 1 For a reservoir destination, enter +n Account to be served by this right -n Fill the first n accounts based on the ratio of their ownership
Supply Data		
1-8	ciopso(1)	Diversion ID where imported water enters the system
1-9	iopsou(2,1)	0 (not used)
1-10	ciopso(2)	NA
1-11	iopsou(4,1)	0
Type Data		
1-12	ityopr(1)	35
Associated Plan Data		
1-13	creuse	Reuse Plan ID (enter NA if none)
Diversion Type		
1-14	cdivtyp	NA
Conveyance Loss (%)		
1-15	OprLoss	0
Miscellaneous Limits		
1-16	OprLimit	0
Start Date		
1-17	IoBeg	First year of operation
End Date		
1-18	IoEnd	Last year of operation

```
Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1             imonsw(1)         Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file

Intervening Structure Data without loss
Include only if the monthly switch (dumx) = 1-10 or < -12
Format (36x, 10a12)
3-1             intern(1,1)       For +dumx, Enter dumx intervening
                                     structure ID's
                                  For -dumx, Enter abs(dumx)-12
                                     intervening structure ID's
```

4.13.36 Seasonal (Daily) Water Right Direct (ityopr=36)

The type 36 operating rule provides a method to limit a direct flow water right to begin on a particular day and end on a particular day during a monthly simulation. In addition it may be used in a daily analysis if a diversion has several water rights, with some controlled by their daily demand and others limited toboth their daily demand data and a specified diversion season.

The type 36 operating right has generic applications. It was originally developed to model Meadow Rights that occur in water districts 1 and 64 of the South Platte River.

```
Row-data        Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
                1x,a12, 1x,2f8.0, 2i8)
1-1             cidvri(1)         Operational right ID
1-2             nameo(1)          Operation right name
1-3             rtem(1)           Administration number
1-4             dumx              Monthly and Intervening Structure
                Switch
                                     +n Number of intervening structures
                                        (max = 10)
                                     -n Include -12 monthly on/off
                                     values minus n intervening
                                        structures
                                        Note, when a negative value is,
                                        provided, it should be -13 or
                                        less for 12 monthly values and
                                        one intervening structure
1-5             ioprsw(1)         Annual On/Off Switch
                                     0 off
                                     1 on
                                     +n Begin in year n
                                     -n Stop after year n

Destination Data
1-6             ciopde            Destination diversion ID
1-7             iopdes(2,1)       Destination structure account,
                                     enter 1 for a diversion,
```

```
Supply Data
1-8            ciopso(1)         Diversion Water Right ID
1-9            iopsou(2,1)       0 (not used)
1-10           ciopso(2)         NA
1-11           iopsou(4,1)       0

Type Data
1-12           ityopr(1)         36

Associated Plan Data
1-13           creuse            NA

Diversion Type
1-14           cdivtyp           Direct

Conveyance Loss (%)
1-15           OprLoss           0

Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation
End Date
1-18           IoEnd             Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)         Monthly switch 0=off,
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file


Intervening Structure Data without loss
Include only if the monthly switch (dumx) = 1-10 or < -12
Format (36x, 10a12)
3-1            intern(1,1)       For +dumx, Enter dumx intervening structure ID's
                                 For -dumx, Enter abs(dumx)-12
                                    intervening structure ID's
```

4.13.37 Augmentation Well Direct (ityopr=37)

The type 37 operating rule provides a method to pump an Augmentation well in order to satisfy a T&C or Augmentation Plan demand. The source is a well water right. The destination is a T&C or Well Augmentation Plan. The following comments are provided to assist in using and interpreting this rule:

- An augmentation well right is typically tied to a unique (augmentation) Well structure. This allows unique return and depletion data associated with the augmentation well to be provided in the well station file (*.wes). Note that return flows associated with an augmentation are typically assigned a unit response function that routes water to the stream in the same time step that they occur.

- This rule requires source 2 (ciopso(2)) be an “Augmentation plan ID”. This allows the augmentation plan requirements associated with the augmentation well to be stored and ultimately satisfied. This plan ID may or may not be the same as the destination plan ID.

- An augmentation well might serve as both a water supply and an augmentation source. This can occur when the same right is assigned to both a standard (irrigation) well structure and an Augmentation well structure. If the administration number assigned in the operational right file is different than the administration number of the source (augmentation) well the operating rule value is used and a warning is printed to the log file. The amount pumped to each demand is limited by the well’s total capacity and water right.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operation right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly On/Off Switch
                                    0 Include no monthly on/off values
                                    12 Include 12 monthly on/off values
1-5            ioprsw(1)         Annual On/Off Switch
                                    0 off
                                    1 on
                                    +n Begin in year n
                                    -n Stop after year n

Destination Data
1-6            ciopde            T&C or Well Augmentation Plan ID
1-7            iopdes(2,1)       0 (not used)

Supply Data
1-8            ciopso(1)         Well Water Right ID
1-9            iopsou(2,1)       0 (not used)
1-10           ciopso(2)         Plan ID used to track the Augmentation
                                    requirement of the Augmentation
                                 Well pumping
1-11           iopsou(4,1)       0

Type Data
1-12           ityopr(1)         37

Associated Plan Data
1-13           creuse            NA

Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0

Miscellaneous Limits
1-16           OprLimit          0

Start Date
1-17           IoBeg             First year of operation

End Date
```

```
1-18            IoEnd               Last year of operation
```

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12

```
2-1             imonsw(1)           Monthly switch 0=off, 1=on
                                       +n Day first used that month
                                       -n Day last used that month
                                    Note the first entry corresponds to the first
                                       month specified in the control file
```

Intervening Structure Data without loss
Include only if the monthly switch (dumx) = 1-10 or < -12
Format (36x, 10a12)

```
3-1             intern(1,1)         For +dumx, Enter dumx intervening
                                       structure ID's
                                    For -dumx, Enter abs(dumx)-12
                                       intervening structure ID's
```

4.13.38 Out-of-Priority Diversion with Plan Direct (ityopr=38)

The type 38, Out-of-Priority Diversion, operating rule provides a method to divert to a reservoir or a diversion out-of-priority with respect to a reservoir based on the upstream storage statute. Source 1 is the senior reservoir right that is being subordinated. Source 2 is the destination reservoir water right that is diverting out-of-priority. The destination is a reservoir or ditch. A plan ID is used to track the volume of water that must be paid back should the subordinated reservoir right go unsatisfied. The following comments are provided to assist in using and interpreting this rule:

- The user must supply an “Out-of-Priority (OOP) Plan ID” associated with the OOP diversion.
- When multiple structures divert with respect to the same subordinated reservoir right, they may be provided the same OOP Plan ID or different OOP Plan ID’s. Separate OOP Plan ID’s are recommended if the user is interested in monitoring the demand and supplies associated with each OOP diversion. A combined OOP Plan ID is recommended if the user is not interested in monitoring the demand and supplies associated with each OOP diversion.
- The administration number provided to the operating rule is typically just senior to the senior subordinated reservoir right.

Row-data   Variable   Description

Control Data

```
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
                1x,a12, 1x,2f8.0, 2i8)
1-1             cidvri(1)           Operational right ID
1-2             nameo(1)            Operation right name
1-3             rtem(1)             Administration number
1-4             dumx                Monthly Intervening Structure Switch
                                       +n Number of intervening structures (max = 10)
                                       12 Monthly (12) on/off values
                                       -n Include -12 monthly on/off
                                          values minus n intervening
                                       structures
                                          Note, when a negative value is,
                                          provided, it should be -13 or
```

```
                                     less for 12 monthly values and
                                     one intervening structure
1-5            ioprsw(1)          Annual On/Off Switch
                                     0 off
                                     1 on
                                     +n Begin in year n
                                     -n Stop after year n
```

Destination Data

```
1-6            ciopde             Diversion or Reservoir ID
1-7            iopdes(2,1)        Destination structure account
                                  For a diversion destination, enter 1
                                  For a reservoir destination, enter
                                     +n Account to be served by this right
                                     -n Fill the first n accounts based on
                                        the ratio of their ownership
```

Supply Data

```
1-8            ciopso(1)          Senior subordinated reservoir right ID
1-9            iopsou(2,1)        0 (not used)
1-10           ciopso(2)          Junior right ID diverting out of priority
1-11           iopsou(4,1)        0 (not used)
```

Type Data

```
1-12           ityopr(1)          38
```

Associated Plan Data

```
1-13           creuse             Reuse Plan ID (used to store amount diverted
                                     out-of-priority)
```

Diversion Type

```
1-14           cdivtyp            NA
```

Conveyance Loss (%)

```
1-15           OprLoss            0
```

Miscellaneous Limits

```
1-16           OprLimit           0
```

Start Date

```
1-17           IoBeg              First year of operation
```

End Date

```
1-18           IoEnd              Last year of operation
```

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12

```
2-1            imonsw(1)          Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file
```

Intervening Structure Data
Include only if the monthly switch (dumx) = 1-10 or < -12
Format (36x, 10a12)

```
3-1            intern(1,1)        For +dumx, Enter dumx intervening
                                     structure ID's
                                  For -dumx, Enter abs(dumx)-12
                                     intervening structure ID's
```

4.13.39 Alternate Point Direct (ityopr=39)

The type 39 operating rule allows a structure to divert at an Alternate Point using a water right that is assigned to another structure (i.e. not assigned to the Alternate Point). The alternate point can be located upstream or downstream of the destination structure. The rule allows water to be diverted at one or both locations up to the decreed amount. Source 1 is the water right that allows the diversion. Source 2 is the location in the network where the Alternate Point will be administered. The destination must be a diversion and is typically (but not required to be) the structure associated with Source 1. The following comments are provided to assist in using and interpreting this rule:

- If the source structure is no longer capable of diverting, its capacity is typically set to zero in the diversion structure file.

- The administration number provided to the operating rule is typically equal to or slightly junior to the decreed water right.

- The source water right may operate as a standard direct flow right and as an alternate point. The total amount diverted at the decreed location and the alternate point are limited to the decreed amount, demand, available supply, etc. When the variable iopsou(2,1) = 0 is the right is used as both a direct flow and alternate point. When the variable iopsou(2,1) = 1 the right is only used as an alternate point.

- When the alternate point is a diversion, results are reported in the Stream Report (*.xdd) as follows:
    1. At the destination, the diversion is reported as From Carrier by Other.
    2. At the alternate point structure, the diversion is reported as From River by Other and Carried, Exchange or Bypassed. The Total Supply associated with the alternate point diversion is therefore zero (diversion less carried water is zero)

- When the alternate point is a well, results are reported in the Stream Report (*.xdd) as follows:
    1. At the destination, the diversion is reported as From Carrier by Other.
    2. At the alternate point structure, the well pumping is reported as From Well and Carried, Exchange or Bypassed. The Total Supply associated with the alternate point diversion is therefore zero (well pumping less carried water is zero).

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operation right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly On/Off Switch
                                    0 Include no monthly on/off values
                                    12 Include 12 monthly on/off values
1-5            ioprsw(1)         Annual On/Off Switch
                                    0 off
                                    1 on
                                    +n Begin in year n
                                    -n Stop after year n
```

Destination Data

1-6	ciopde	Destination ID (must be a diversion)
1-7	iopdes(2,1)	Enter 1

Supply Data

1-8	ciopso(1)	Diversion Water right serving the alternate point
1-9	iopsou(2,1)	0 The source water right (ciopso(1)) is left on (i.e. it can be used as a both a direct flow right and this operating rule) 1 The source water right (ciopso2(1) is turned off (i.e. it can only be used by this operating rule)
1-10	ciopso(2)	Location wehere the Alternate Point is being administred (may be any diversion or well location)
1-11	iopsou(4,1)	0 do not limit the diversion to flow at the source right location **1 do limit the diversion to flow at the source right location**

Type Data

1-12	ityopr(1)	39

Associated Plan Data

1-13	creuse	NA

Diversion Type

1-14	cdivtyp	Diversion

Conveyance Loss (%)

1-15	OprLoss	0

Miscellaneous Limits

1-16	OprLimit	0

Start Date

1-17	IoBeg	First year of operation

End Date

1-18	IoEnd	Last year of operation

Monthly Data

Free Format

Include only if the monthly switch (dumx) = 12 or less than -12

2-1	imonsw(1)	Monthly switch 0=off, 1=on +n Day first used that month -n Day last used that month Note the first entry corresponds to the first month specified in the control file

Intervening Structure Data without loss

Include only if the monthly switch (dumx) = 1-10 or < -12

Format (36x, 10a12)

3-1	intern(1,1)	For +dumx, Enter dumx intervening structure ID's For -dumx, Enter abs(dumx)-12 intervening structure ID's

4.13.40 South Platte Compact Release (ityopr=40)

For a complete description of how the South Platte compact is implemented in StateMod see section 7.29. The Type 40 operating rule simulates a release from the South Platte Compact Plan. It should be used to allow any diversion not located in water district 64 (e.g. upstream of the Washington county line) to attempt to divert water stored in the South Platte Compact plan and therefore not be called out by the compact. In addition, it should be used to release water from the compact plan to the compact itself. The following comments are provided:

- To serve any diversion that is water short and not located in water district 64 the **destination should be assigned 64x.**
- When the destination is any diversion not located in water district 64 (e.g 64x) the administration number assigned is not used since this operating rule is called immediately following the priority of any water right that is water short and not located in water district 64.
- To serve the compact itself the destination should be assigned an instream flow that represents the South Platte Compact.
- The administration number assigned to the operating rule used to release water from the South Platte Compact to the compact itself should be the most junior in the basin.
- Results for a type 40, South Platte Compact Storage, are reported in the Stream Report (*.xdd) as follows:
    1. When the destination is any structure not located in water district 64, the diversion is reported as From River by Other because it is diverted by an operating rule. The Total Supply equals From River by Other that also equals Water Use To Other. In the Station Balance accounting River Outlfow equals the River Inflow less River Divert and River by Well.
    2. When the destination is the South Platte Compact, the diversion is reported as From River by Other because it is diverted by an operating rule. The Total Supply equals From River by Other that also equals Water Use To Other. In the Station In/Out accounting the return flow equals the divesion because it is non-consumptive. In the Station Balance accounting River Outlfow equals the River Inflow less River Divert and River by Well.
- The check file contains a list of every structure served by a type 40 operating rule.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
```

		month specified in the control file
1-5	ioprsw(1)	Annual On/Off Switch 0=off 1=on +n=Begin in year n -n=Stop after year n
Destination Data		
1-6	ciopde	Enter 64x to indicate the operating rule serves any water right not located in water district 64; or Enter the South Platte compact instream flow ID to indicate the operating rule provides water to the compact itself.
1-7	iopdes(2,1)	Destination Account, enter 1
Supply Data		
1-8	ciopso(1)	Compact plan ID (must be an Administrative plan, type 11)
1-9	iopsou(2,1)	0
1-10	ciopso(2)	NA
1-11	iopsou(4,1)	0
Type Data		
1-12	ityopr(1)	40
Associated Plan Data		
1-13	creuse	NA
Diversion Type		
1-14	cdivtyp	Diversion
Conveyance Loss (%)		
1-15	OprLoss	0
Miscellaneous Limits		
1-16	OprLimit	0
Start Date		
1-17	IoBeg	First year of operation
End Date		
1-18	IoEnd	Last year of operation
Type Data		
1-12	ityopr(1)	40
Associated Plan Data		
1-13	creuse	NA
Diversion Type		
1-14	cdivtyp	NA
Conveyance Loss (%)		
1-15	OprLoss	0
Miscellaneous Limits		
1-16	OprLimit	0
Start Date		
1-17	IoBeg	First year of operation

```
End Date
1-18            IoEnd               Last year of operation
```

4.13.41 Reservoir Storage with Special Limits Direct (ityopr=41)

The type 41 operating rule allows a reservoir to store reservoir water right up to the volume of water stored in an Out-Of-Priority plan. It was originally developed to simulate the so called "1955 Exchange" on the Blue River that limits storage in Green Mountain to the amount of water diverted out-of-priority by Denver and Colorado Springs with respect to Green Mountain Reservoir. The following are noted:

- Source 1 should be a reservoir water right supplied in the reservoir right file (*.rer). Note when this right is tied to a type 41 operating rule it is turned off and StateMod prints a warning. By turning this right off, StateMod ensures this right no longer diverts as a standard reservoir but instead is controlled by information in the Type 41 operating rule.

- The administration number assigned in the reservoir right file overrides the administration number assigned in the operating rule. Note if the administration numbers are not equal, StateMod warns the user that the data in the reservoir right file controls.

- The destination should be a reservoir.

- The variable intern is used to store up to 10 plans that might limit the reservoir storage.

- The intervening plans should be Out-of-Priority (type 9) Plans.

```
Row-data        Variable            Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
                1x,a12, 1x,2f8.0, 2i8)
1-1             cidvri(1)           Operational right ID
1-2             nameo(1)            Operation right name
1-3             rtem(1)             Administration number
1-4             dumx                Monthly and Limiting Plan Switch
                                       +n Number of Limiting OOP plans
                                          (max = 10)
                                       -n Include -12 monthly on/off
                                          values minus n limiting OOP
                                          plans
                                          Note, when a negative value is,
                                          provided, it should be -13 or
                                          less for 12 monthly values and
                                          one limiting OOP plan)
1-5             ioprsw(1)           Annual On/Off Switch
                                       0 off
                                       1 on
                                       +n Begin in year n
                                       -n Stop after year n

Destination Data
1-6             ciopde              Reservoir ID
1-7             iopdes(2,1)         Destination structure account
```

```
                               For a reservoir destination, enter
                                  +n Account to be served by this right
                                  -n Fill the first n accounts based on
                                     the ratio of their ownership
```

Supply Data

```
1-8            ciopso(1)         Reservoir Water right
1-9            iopsou(2,1)       0 (not used)
1-10           ciopso(2)         NA
1-11           iopsou(4,1)       0 (not used)
```

Type Data

```
1-12           ityopr(1)         41
```

Associated Plan Data

```
1-13           creuse            NA
```

Diversion Type

```
1-14           cdivtyp           Diversion
```

Conveyance Loss (%)

```
1-15           OprLoss           0
```

Miscellaneous Limits

```
1-16           OprLimit          0
```

Start Date

```
1-17           IoBeg             First year of operation
```

End Date

```
1-18           IoEnd             Last year of operation
```

Monthly Data

Free Format

Include only if the monthly switch (dumx) = 12 or less than -12

```
2-1            imonsw(1)         Monthly switch 0=off, 1=on
                                    +n Day first used that month
                                    -n Day last used that month
                                 Note the first entry corresponds to the first
                                    month specified in the control file
```

Limiting OOP Plan Volume Data

Include only if the monthly switch (dumx) = 1-10 or < -12

Format (36x, 10a12)

```
3-1            intern(1,1)       For +dumx, Enter dumx limiting
                                    OOP Plan ID’s
                                 For -dumx, Enter abs(dumx)-12
                                    limiting OOP PlanID's
```

4.13.42 Plan Demand Reset (ityopr=42)

The type 42 operating rule provides a method to reset a plan demand. The following are noted:

- Because a type 42 rule does not provide a water supply it should, in general, only be used be used to mimic historical operations and/or restrict an operational activity to annual operations.

- Source 1 should be one of the following plan types: 1 = Term and Condition, 2 = Well Augmentation, 9 = Out-of-Priority Plan.

```
Row-data        Variable           Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri(1)          Operational right ID
1-2            nameo(1)           Operational right name
1-3            rtem(1)            Administration number
1-4            dumx               Monthly Switch
                                     0 No monthly on/off values
                                     12 Monthly on/off switches
1-5            ioprsw(1)          Annual On/Off Switch
                                     0=off
                                     1=on
                                     +n Begin in year n
                                     -n Stop after year n

Destination Data
1-6            ciopde             NA
1-7            iopdes(2,1)        0

Supply Data
1-8            ciopso(1)          ReUse plan ID
1-9            iopsou(2,1)        Enter 0

1-10           ciopso(2)          NA
1-11           iopsou(4,1)        0

Type Data
1-12           ityopr(1)          42

Associated Plan Data
1-13           creuse             NA

Diversion Type
1-14           cdivtyp            NA

Conveyance Loss (%)
1-15           OprLoss            0

Miscellaneous Limits
1-16           OprLimit           0

Start Date
1-17           IoBeg              First year of operation

End Date
1-18           IoEnd              Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)          Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file
```

4.13.43 In-Priority Supply (ityopr=43)

The type 43 operating rule provides a method to supply a T&C requirement or a Well Augmentation Requirement if the amount owed in the current time step occurs in priority. The following are noted:

- In order to determine if future pumping depletions can be satisfied In-Priority a well must be tied to an augmentation plan (see **Section 4.49**)
- The amount of water pumped and its associated depletion over time is reported as part of a standard plan output (*.xpl). Source 1 of this report is reserved for In_Priority_Supply_Now (depletions that occur in priority in the month pumped). Source 'n' will report in-priority depletions (depletions that occur at a time step after the pumping) if an In-Priority Supply(type 43) operating rule is specified.
- Pumping is determined to be In-Priority in the time step it occurs if there is water available in the stream to offset any net depletion at that time. Therefore, it is allocated at the administration number of the well and is not controlled by this operating rule.
- T&C requirement is determined to be In-Priority in the time step it occurs if there is water available in the stream to offset any net depletion at that time. It is allocated at the administration number in this operating rule.
- In-Priority Depletions associated with pumping in a prior time step occur if there is water available in the stream to offset the depletion when they occur at the river. Because future depletions are stored by augmentation plan, not well, this determination is made at the administration number assigned to this In-Priority Supply Operating Rule (type 43).
- It is impractical to determine if future depletions are In-Priority using the administration number of each well because there are often thousands of wells being modeled and future depletions often extend over 20 years. In addition, this estimate is considered appropriate for a planning model because wells are typically junior to most direct flow and storage rights.
- The administration number assigned to an In-Priority Supply Operating Rule (type 43) is typically a decree weighted average priority of the wells associated with the well augmentation plan. The decree weighted average priority is calculated as follows:

  Admin_Ave = (sum(WR(j) * Admin(j)) / (sum WR(j)),

  Where:
  Admin_Ave is the weighted average administration number
  WR(j) is the decreed water right for well j
  Admin(j) is the administration number of well j
  sum() is the summation

```
Row-data        Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1             cidvri(1)         Operational right ID
1-2             nameo(1)          Operational right name
```

```
1-3            rtem(1)            Administration number
1-4            dumx               Monthly Switch
                                     0 No monthly on/off values
                                     12 Monthly on/off switches
1-5            ioprsw(1)          Annual On/Off Switch
                                  0=off
                                     1=on
                                     +n Begin in year n
                                     -n Stop after year n
```

Destination Data

```
1-6            ciopde             Well Augmentation Plan or
                                     Term and Condition Plan
1-7            iopdes(2,1)        0
```

Supply Data

```
1-8            ciopso(1)          NA
1-9            iopsou(2,1)        0
1-10           ciopso(2)          NA
1-11           iopsou(4,1)        0
```

Type Data

```
1-12           ityopr(1)          43
```

Associated Plan Data

```
1-13           creuse             NA
```

Diversion Type

```
1-14           cdivtyp            NA
```

Conveyance Loss (%)

```
1-15           OprLoss            0
```

Miscellaneous Limits

```
1-16           OprLimit           0
```

Start Date

```
1-17           IoBeg              First year of operation
```

End Date

```
1-18           IoEnd              Last year of operation
```

Monthly Data

Free Format

Include only if the monthly switch (dumx) = 12 or less than -12

```
2-1            imonsw(1)          Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file
```

4.13.44 Recharge Well (ityopr=44)

The type 44 operating rule provides a method to pump a Recharge well in order to fill a Recharge Reservoir. The following comments are provided to assist in using and interpreting this rule:

- A recharge well operating rule ties a well right (ciopso(1)) to a recharge reservoir (ciopdes(1)) and account (iopdes(2,1)). Typically the recharge reservoir's seepage provides a lagged water supply for an augmentation plan.

- A recharge well only diverts when it is in priority.

- A recharge well is typically located close to the river and has a relatively quick, if not instantaneous, impact on the river. This quick response is not a requirement, simply how they typically operate. If the recharge well has a lagged depletion that is out of priority its augmentation requirement is included in the plan data (creuse). The depletions associated with this source are specified in the well station file (*.wes).

- A recharge well might serve as both a water supply and a recharge reservoir's source. This can occur when the same well right is assigned to both a standard (irrigation) well structure and a type 44 operating rule. If the administration number assigned in the operational right file is different than the administration number of the source (augmentation) well the operating rule value is used and a warning is printed to the log file. The amount pumped to each demand is limited by the well's total capacity and water right.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri(1)         Operational right ID
1-2            nameo(1)          Operation right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly On/Off Switch
                                    0 Include no monthly on/off values
                                    12 Include 12 monthly on/off values
1-5            ioprsw(1)         Annual On/Off Switch
                                    0 off
                                    1 on
                                    +n Begin in year n
                                    -n Stop after year n
Destination Data
1-6            ciopde            Recharge Reservoir
1-7            iopdes(2,1)       Recharge Reservoir Account

Supply Data
1-8            ciopso(1)         Well Water Right ID
1-9            iopsou(2,1)       0 (not used)
1-10           ciopso(2)         NA (not used)
1-11           iopsou(4,1)       0

Type Data
1-12           ityopr(1)         44

Plan Data
1-13           creuse            Augmentation Plan used to track future
                                    depletion obligations, if any

Diversion Type
1-14           cdivtyp           NA

Conveyance Loss (%)
1-15           OprLoss           0
```

```
Miscellaneous Limits
1-16            OprLimit          0

Start Date
1-17            IoBeg             First year of operation

End Date
1-18            IoEnd             Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1             imonsw(1)         Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file

Intervening Structure Data without loss
Include only if the monthly switch (dumx) = 1-10 or < -12
Format (36x, 10a12)
3-1             intern(1,1)       For +dumx, Enter dumx intervening
                                     structure ID's
                                  For -dumx, Enter abs(dumx)-12
                                     intervening structure ID's
```

4.13.45 Carrier with Loss (ityopr=45)

The type 45 operating rule provides a method to divert water to a carrier with loss. The carrier then delivers water to a diversion or reservoir. The source may be a diversion water right or, if delivering to a reservoir, a diversion or reservoir water right. The type 45 rule can include transit losses on up to 10 intervening structures. Also it allows the user to specify a percent of the source right that is owned. This routine is similar to type 11 but includes more extensive treatment of transit losses and water right ownership. The following are noted:

- A diversion is implicitly constrained by the capacity of the destination structure (variable ciopde).
- The source water right may operate as a standard direct flow right and/or as a carrier. When the variable iopsou(2,1) = 0 the right is used as a carrier only. When the variable iopsou(2,1) = 1 the right is used as both a direct flow right and a carrier right.
- If a source right is used by both a direct flow and operating rule total diversions by both the direct flow and operating rule are not allowed to exceed the decreed capacity.
- If the destination is a diversion, the source should be a diversion water right.
- **If the destination is a diversion, the demand should be specified at the location where the destination is located** (i.e. not the carrier location). Therefore any transit losses between the carrier headgate and the destination will be calculated by StateMod and implicitly included in the river headgate demand.

- If the destination is a reservoir, the source should be a diversion water right or a reservoir water right.

- **If the destination is a reservoir, the demand is calculated at the location where the reservoir is located** (i.e. not the carrier location). Therefore any transit losses between a river headgate and the destination will be calculated by StateMod and implicitly included in the river headgate demand.

- If the destination is a reservoir and the source is a diversion right, the operating rule diversion IS NOT CHARGED against the reservoir's decree.

- If the destination is a reservoir and the source is a reservoir right, the operating rule diversion IS CHARGED against the reservoir's decree.

- Transit losses are reported with the carrier structure, not the destination.

- When the destination is an off-channel reservoir and the source is its water right, the administration location (ciopso2) may be used to administer the reservoir right at a diversion location located on the mainstem. This diversion location is implicitly treated as a carrier.

- When the miscellaneous limit (oprlimit) is set to a non zero value indicating a limit is provided the source constraint (ipsou(2,k) should be set to 1 to indicate the source water right is controlled by this operating rule. Without this constraint, water may be diverted under the source right, not this operating rule.

- When the miscellaneous limit (oprlimit) is set to 2 the diversion is limited to both the destination demand (ciopde) and the demand of the reservoir structure listed in row 4. The demand of the reservoir structure listed in row 4 is obtained from the monthly target file (*.tam) or daily reservoir target file (*.tad). Note that when the demand (ciopde) is a reservoir the monthly target (along with the capacity, etc.) is implicitly used to limit the amount diverted to a reservoir. However since a resrvoirs capacity may go up or down during a time step the voulue diverted may exceed the target value. When data is assigned herein the target is also used as a volumetric limit that cannot be exceeded in a given time step. This option is, typically, only used when the destination is a Recharge Reservoir.

- When the miscellaneous limit (oprlimit) is set to 3 the diversion is limited to both the destination demand (ciopde) and the demand of the diversion structure listed in row 4. The demand of the diversion structure listed in row 4 is obtained from the monthly diversion demand file (*.ddm) or daily diversion demand file (*.ddd).

- When the miscellaneous limit (oprlimit) is set to 4 the diversion is limited to both the destination demand (ciopde) and the monthly and annual limits specified by the type 47 operating rule listed in row 4.

- Results for a type 45, Carrier with Loss, are reported in the Stream Report (*.xdd) as follows:
    1. At the destination, the diversion is reported as From Carrier by Other,
    2. At the carrier structure, the diversion is reported as From River by Other, loss is reported as From River Loss, and Carried, Exchange or Bypassed is From River by Other less From River Loss. The Total Supply associated with the carrier is zero (diversion less loss less carried water equals zero)

Row-data	Variable	Description
Control Data		
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12, 1x,a12,1x, 2f8.0, 2i8)		
1-1	cidvri	Operational right ID
1-2	nameo(1)	Operational right name
1-3	rtem(1)	Administration number. Note if ciopso(1) is a diversion right, its administration number is used and rtem is ignored
1-4	dumx	Monthly and Structure Switch +n Number of intervening structures (max = 10) -n Include 12 monthly on/off values minus n intervening structures Note, when a negative value is provided, it should be -13 or less
1-5	ioprsw(1)	Annual On/Off Switch 0=off 1=on +n=Begin in year n -n=Stop after year n
Destination Data		
1-6	ciopde	Destination diversion or reservoir ID
1-7	iopdes(2,1)	Destination structure account, 1 for a diversion destination +n for a reservoir destination +n Account served by this right -n Fill the first n accounts using the ratio of their ownership
Source Data		
1-8	ciopso(1)	Water right ID under which the diversion occurs. Note may be a diversion right or a reservoir right
1-9	iopsou(2,1)	0 The source water right (ciopso(1)) is left on (i.e. it can be used as a both a direct flow right and this operating rule) 1 The source water right (ciopso(1) is turned off (i.e. it can only be used by this operating rule)
1-10	ciopso(2)	NA the water right is administered at the location specified in the appropriate water right file +n the water right is administered at location n (e.g. a reservoir right is administered at the carrier or the reservoir)
1-11	iopsou(4,1)	+n Percent of the water right ciopso(1) to be used as a source.
Type Data		
1-12	ityopr(1)	45
Associated Plan Data		
1-13	creuse	NA If the carrier loss is not associated with a recharge source

		+n Enter Recharge Plan ID if the carrier loss is a recharge source. Note the Plan type must be recharge (type 8).

Diversion Type

1-14	cdivtyp	NA

Conveyance Loss (%)

1-15	OprLoss	0 No Transit loss

Miscellaneous Limits

1-16	OprLimit	0 The source water right is not Shared with another operating rule. 1 Not currently operational. 2 In addition to the destination demand (ciopde) the diversion is limited to the reservoir demand of the structure listed in Row 4. 3 In addition to the destination demand (ciopde) the diversion is limited to the diversion demand of the structure listed in Row 4. 4 In addition to the destination demand (ciopde) the diversion is limited to the monthly and annual limits of the Type 47 operating rule listed in Row 4

Start Date

1-17	IoBeg	First year of operation

End Date

1-18	IoEnd	Last year of operation

Monthly Data

Free Format

Include only if monthly & structure switch (dumx) = 12 or less than -12

2-1	imonsw(1)	Monthly switch 0=off, 1=on +n Day first used that month -n Day last used that month Note the first entry corresponds to the first month specified in the control file

Intervening Structure Data with loss

Include only if the monthly & structure switch (dumx) = 1-10 or < -12

See Section 7.39 for the approach used to model an augmentation station (e.g. a structure that carries a diversion, typically with loss, then returns non-lost water to the river).

Free Format

3b-1	intern(1,1)	Intervening structure ID (e.g. a Diversion ID or Stream ID)
3b-2	OprLossC(l,1)	Carrier Loss for Structure ID %
3b-3	InternT(1,1)	Intervening Structure Type Enter Carrier if it is a diversion structure located on the river Enter Return if it is a return location on the River Repeat for +dumx values

Additional Demand constraint
Include only if the switch (OprLimit) = 2 or 3

```
Free Format
4-1            cx                  If Oprlimit = 2 enter the
                                     diversion ID whos demand
                                     will limit the amount diverted.
                                   If Oprlimit = 3 enter the
                                     Recharge reservoir ID whos demand
                                     will limit the amount diverted.
                                   If Oprlimit = 4 enter the Type 47
                                     Operational right ID that contains
                                     Monthly and annual diversion limits
```

4.13.46 Multiple Plan Ownership (ityopr=46)

The type 46 operating rule provides a method to distribute water from one accounting plan to multiple accounting plans at the same priority. It is typically used along with a Direct Flow Exchange (type 24) or Direct Flow Bypass (type 25) when the transferred water is used by more than one owner. The following are noted:

- The source is an accounting plan for which the water supply is typically a water transfer associated with a Direct Flow Exchange (type 24) or Direct Flow Bypass (type 25).
- The destination is two or more accounting plans. Each plan represents the percent ownership of the transferred water from the original accounting plan. Each should be located downstream of the source account.
- After the water is distributed via the Type 46 rule, water is typically released from the destination plans using an Admin Plan Direct Release (type 27), or an Admin Plan Exchange (type 28), or an Admin Plan Spill (type 29).
- The percent ownership is specified using variable iopdes(2,k) as a percent.
- The maximum number of owners is set at 10.

```
Row-data       Variable            Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri              Operational right ID
1-2            nameo(1)            Operational right name
1-3            rtem(1)             Administration number
1-4            dumx                Monthly and Structure Switch
                                      +n Number of intervening structures
                                         (max = 10)
                                      -n Include -12 for monthly on/off
                                         Values minus n intervening
                                         structures
                                         Note, when a negative value is,
                                         provided, it should be -13
                                         or less)
1-5            ioprsw(1)           Annual On/Off Switch
                                      0=off
```

1=on
+n=Begin in year n
-n=Stop after year n

Destination Data

1-6	ciopde	Destination plan ID
1-7	iopdes(2,1)	Destination ownership %

Source Data

1-8	ciopso(1)	Accounting Plan ID
1-9	iopsou(2,1)	1
1-10	ciopso(2)	NA
1-11	iopsou(4,1)	NA

Type Data

1-12	ityopr(1)	46

Associated Plan Data

1-13	creuse	NA

Diversion Type

1-14	cdivtyp	Diversion

Conveyance Loss (%)

1-15	OprLoss	NA

Miscellaneous Limits

1-16	OprLimit	+n Number of Destinations

Start Date

1-17	IoBeg	First year of operation

End Date

1-18	IoEnd	Last year of operation

Repeat the Destination plan ID (ciopde) and Destination ownership % (iopdes(2,1)) for the number of destinations (OprLimit(k))

Format (81x, a12, i8)

Monthly Data

Free Format

Include only if OprLoss = 0 and the monthly switch (dumx) = 12 or less than -12

2-1	imonsw(1)	Monthly switch 0=off, 1=on +n Day first used that month -n Day last used that month Note the first entry corresponds to the first month specified in the control file

4.13.47 Accounting Plan Limit (ityopr=47)

The type 47 operating rule provides a method to impose monthly and annual limits for one or more operating rules. It is typically used when the source of the water supply is a "standard" storage right. For example if water is stored in a reservoir under a "standard" storage right, releases to selected users might be limited to the monthly and annual limits imposed by this rule. This rule has generic application but was developed for the Colorado River Basin where replacement reservoir releases from Green Mountain Reservoir, Williams Fork Reservoir and Wolford Mountain Reservoir are limited to 66,000 af/yr. The Accounting Plan assigned as the source in this rule is typically tied to a Replacement Reservoir Release (type 10) or a Direct Flow Release with a Plan (type 27). The following are noted:

- The operating rule's source is an accounting plan that requires a monthly or annual limit. It can be located anywhere in the network.
- The operating rule's destination is null (i.e. the rule simply imposes monthly or annual limits on any water user tied to this plan).
- The administration number specified for this plan is not used by StateMod (i.e. it is simply a place holder).
- The annual limits are reset at the month that corresponds to the source variable iopsou(2,k). For example 1 = January, 2=February, etc.)
- Monthly and annual data is required for this operating rule.

```
Row-data       Variable          Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri            Operational right ID
1-2            nameo(1)          Operational right name
1-3            rtem(1)           Administration number
1-4            dumx              Monthly and Structure Switch
                                    +n Number of intervening structures
                                       (max = 10)
                                    -n Include -12 for monthly on/off
                                       Values minus n intervening
                                       structures
                                       Note, when a negative value is,
                                       provided, it should be -13 or less)
1-5            ioprsw(1)         Annual On/Off Switch
                                    0=off
                                    1=on
                                    +n=Begin in year n
                                    -n=Stop after year n

Destination Data
1-6            ciopde            NA
1-7            iopdes(2,1)       NA

Source Data
1-8            ciopso(1)         Accounting Plan ID
1-9            iopsou(2,1)       Month when the operatingal limits are
                                 Reset (e.g. 1= January, 2 = February,
                                 etc).
```

```
1-10           ciopso(2)          NA
1-11           iopsou(4,1)        NA
```

Type Data

```
1-12           ityopr(1)          47
```

Associated Plan Data

```
1-13           creuse             NA
```

Diversion Type

```
1-14           cdivtyp            Diversion
```

Conveyance Loss (%)

```
1-15           OprLoss            NA
```

Miscellaneous Limits

```
1-16           OprLimit           0 Do not include Monthly or Annual
                                     Operational limits
                                  1 Monthly and Annual diversion
                                     limits are provided (see row 3)
```

Start Date

```
1-17           IoBeg              First year of operation
```

End Date

```
1-18           IoEnd              Last year of operation
```

Monthly Data

Free Format

Include only if OprLoss = 0 and the monthly switch (dumx) = 12 or less than -12

```
2-1            imonsw(1)          Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds
                                     to the first month specified in
                                     the control file
```

Operating Limits (Monthly and Annual)

Include if OprLimit = 1

```
3-1            OprMax(1,1-12)     Monthly exchange limit (af/mo)
3-13           OprMax(1,13)       Annual exchange limit (af/yr)
```

4.13.48 Plan or Reservoir Reuse to a T&C or Augmentation Plan Direct (ityopr=48)

The type 48 operating rule provides a method to release water from a reservoir, recharge site or Reuse Plan to a T&C or Well Augmentation Plan destination (demand) via a direct release to the river. The following comments are provided:

- A “ReUse Plan” **source** is a special structure type that can be used to provide water supplies that might accrue from a water right transfer or reusable imported water.. See Section 7.23 for more details.

- A “Recharge Plan” **source** is a special structure type that can be used to provide water supplies that might accrue from a reservoir or canal seepage.

- A “Special Augmentation” Plan **source** is a plan type that can be used to recognize a physical water supply is not required because of an administrative decision. Examples are wells located in a designated basin or decreed as non tributary.

- A “T&C” Plan destination (**demand)** is a special structure type that can be used to store Terms and Conditions (demands) that might be imposed on a water use as part of a water transfer.

- An “Augmentation” Plan destination (**demand)** is a plan type that can be used to store water demands imposed on a water use in order to allow a well to pump out of priority.

- A “Special Augmentation” Plan destination (**demand)** is a plan that can be used to store water demands that can be offset by an administrative decision. Examples are wells located in a designated basin or decreed as non tributary.

- If the variable OprLimit is set to 0 no adjustment to monthly or annual diversion limits will be performed. If the variable OprLimit is set to -1 the operating rule ID specified in row 4 will have its monthly and annual diversion limits adjusted by the amount released.

- If the variable ceuse is set to a plan ID, any canal losses will be routed to that plan. Note the plan type must be 8 (recharge).

- Results for a type 48, Reservoir to a Plan Direct, are reported in the Stream Report (*.xdd) as follows:
    1. At the destination well plan, the diversion is reported as From River by Storage (exchange) and the Total Supply equals From River by Other. The station balance reports River Divert as zero because the diversion is to a plan which is non-consumptive.
    2. At the source reservoir on only carrier and Station Balance data are reported. The River Divert equals the net amount diverted at the reservoir (diversion less release). If the reservoir does not store then the net amount diverted should be negative and equal to the amount released to the destination well plan less any losses.

```
Row-data        Variable            Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12, 1x,2f8.0, 2i8)
1-1            cidvri(1)           Operational right ID
1-2            nameo(1)            Operational right name
1-3            rtem(1)             Administration number
1-4            dumx                Monthly Switch
                                      0 No monthly on/off values
                                      12 Number of monthly on/off
                                      Switches provided
1-5            ioprsw(1)           Annual On/Off Switch
                                      0=off
                                      1=on
                                      +n Begin in year n
                                      -n Stop after year n

Destination Data
1-6            ciopde              Plan ID (must be a T&C Plan (type 1)
                                      or a Well Augmentation Plan (type
```

		2) or a Special Augmentation Plan (type 10)
1-7	iopdes(2,1)	0 (Not used)

Supply Data

1-8	ciopso(1)	Reservoir ID or Recharge Plan ID or Reuse Plan ID or Special Augmentation Plan ID. If a plan it must be a Reservoir Recharge Plan (type 8) or CU reuse plan (type 3 or 4) or Transmtnplan reuse plan (type 5, 6 or 7) or a Special Augmentation Plan (type 10)
1-9	iopsou(2,1)	If ciopso(1) is a reservoir, enter the reservoir account If ciopso(1) is not a reservoir enter 0
1-10	ciopso(2)	If ciopso(1) is a Recharge Plan enter the associated Reservoir ID, otherwise enter NA
1-11	iopsou(4,1)	0

Type Data

1-12	ityopr(1)	48

Associated Plan Data

1-13	creuse	NA Canal losses are routed to the river Plan ID Canal losses are routed to Plan ID

Diversion Type

1-14	cdivtyp	NA

Conveyance Loss (%)

1-15	OprLoss	0

Miscellaneous Limits

1-16	OprLimit	0

Start Date

1-17	IoBeg	First year of operation

End Date

1-18	IoEnd	Last year of operation

Monthly Data

Free Format

Include only if the monthly switch (dumx) = 12 or less than -12

2-1	imonsw(1)	Monthly switch 0=off, 1=on +n Day first used that month -n Day last used that month Note the first entry corresponds to the first month specified in the control file

4.13.49 Plan or Reservoir Reuse to a T&C or Augmentation Plan by Exchange (ityopr=49)

The type 49 operating rule provides a method to release water from a reservoir, recharge site or Reuse Plan to a T&C or Well Augmentation Plan destination (demand) via an exchange from the river. The following comments are provided:

- A "ReUse Plan" **source** is a special structure type that can be used to provide water supplies that might accrue from a water right transfer or reusable imported water. See Section 7.23 for more details.

- A "Recharge Plan" **source** is a special structure type that can be used to provide water supplies that might accrue from a reservoir or canal seepage.

- A "Special Augmentation" Plan **source** is a plan type that can be used to recognize a physical water supply is not required because of an administrative decision. Examples are wells located in a designated basin or decreed as non tributary.

- A "T&C" Plan destination (**demand)** is a special structure type that can be used to store water Terms and Conditions (demands) that might be imposed on a water use as part of a water transfer.

- A "Augmentation" Plan destination (**demand)** is a plan type that can be used to store water demands imposed on a water use in order to allow a well to pump out of priority.

- A "Special Augmentation" Plan destination (**demand)** is a plan that can be used to store water demands that can be offset by an administrative decision. Examples are wells located in a designated basin or decreed as non tributary.

- If the variable OprLimit is set to 0 no adjustment to monthly or annual diversion limits will be performed. If the variable OprLimit is set to -1 the operating rule ID specified in row 4 will have its monthly and annual diversion limits adjusted by the amount released.

- Results for a type 49, Reservoir to a Plan by Exchange, are reported in the Stream Report (*.xdd) as follows:
    1. At the destination well plan, the diversion is reported as From River by Other (exchange) and the Total Supply equals From River by Other. The station balance reports River Divert as zero because the diversion is to a plan which is non-consumptive.
    2. At the source reservoir only carrier and Station Balance data are reported. The River Divert equals the net amount diverted at the reservoir (diversion less release). If the reservoir does not store then the net amount diverted should be negative and equal to the amount released to the destination well plan less any losses.

```
Row-data        Variable            Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
                1x,a12, 1x,2f8.0, 2i8)
1-1             cidvri(1)           Operational right ID
1-2             nameo(1)            Operational right name
1-3             rtem(1)             Administration number
1-4             dumx                Monthly Switch
```

		0 No monthly on/off values 12 Number of monthly on/off switches provided
1-5	ioprsw(1)	Annual On/Off Switch 0=off 1=on +n Begin in year n -n Stop after year n

Destination Data

1-6	ciopde	Plan ID (must be a T&C Plan (type 1) or Augmentation Plan (type 2) or Special Augmentation Plan (type 10)
1-7	iopdes(2,1)	0 (Not used)

Supply Data

1-8	ciopso(1)	Reservoir ID or Recharge Plan ID or Reuse Plan ID or Special Augmentation Plan ID If a plan it must be Seepage Plan (type 8) or CU reuse plan (type 3 or 4) or a Transmtn reuse plan (type 5, 6 or 7) or a Special Augmentation Plan (type 10)
1-9	iopsou(2,1)	If ciopso(1) is a reservoir, enter the reservoir account If ciopso(1) is a plan, enter NA
1-10	ciopso(2)	If ciopso(1) is a Recharge Plan enter the associated Reservoir ID, otherwise enter NA
1-11	iopsou(4,1)	0

Type Data

1-12	ityopr(1)	49

Associated Plan Data

1-13	creuse	NA

Diversion Type

1-14	cdivtyp	NA

Conveyance Loss (%)

1-15	OprLoss	0

Miscellaneous Limits

1-16	OprLimit	0

```
Start Date
1-17           IoBeg              First year of operation

End Date
1-18           IoEnd              Last year of operation

Monthly Data
Free Format
Include only if the monthly switch (dumx) = 12 or less than -12
2-1            imonsw(1)          Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
                                     month specified in the control file
```

4.13.50 South Platte Compact Storage (ityopr=50)

For a complete description of how the South Platte compact is implemented in StateMod see section 7.29. The Type 50 operating rule temporarily stores water available to the South Platte Compact in priority in an administrative plan. It is used in conjunction with a type 40 operating rule to insure the South Platte Compact does not call out any water right located in water district 64 (e.g. upstream of the Washington county line). In addition it is used with a type 40 operating rule to release water to the compact itself after every junior water right not located in water district 64 has had the opportunity to insure it was not called out by the compact. The following comments are provided:

- The type 50 operating rule turns off the source instream flow right so that it is completely controlled by the type 50 operating rule.

- The administration number assigned to the operating rule used to store water in the South Platte Compact plan (type 50) should be 17332.00000, the value associated with the South Platte's decreed priority of June 14, 1897.

- Results for a type 50, South Platte Compact Storage, are reported in the Stream Report (*.xdd) as follows:

    - At the destination compact plan, the diversion is reported as From River by Other because it is diverted by an operating rule. The Total Supply equals From River by Other that equals Water Use To Other. The station In/Out reports the diversion as a return flow because it is non-consumptive. The Station Balance reports River Divert as the amount diverted to the plan.

```
Row-data       Variable           Description

Control Data
Format (a12, a24, 12x, 4x, f12.5, f8.0, i8, 3(1x,a12,i8), i8, 1x,a12,
               1x,a12,1x, 2f8.0, 2i8)
1-1            cidvri(1)          Operational right ID
1-2            nameo(1)           Operational right name
1-3            rtem(1)            Administration number
1-4            dumx               Monthly switch 0=off, 1=on
                                     +n Day first used that month
                                     -n Day last used that month
                                  Note the first entry corresponds to the first
```

```
                                      month specified in the control file
1-5            ioprsw(1)           Annual On/Off Switch
                                      0=off
                                      1=on
                                      +n=Begin in year n
                                      -n=Stop after year n
```

Destination Data

```
1-6            ciopde              Enter the plan ID that corresponds
                                     To the South Platte compact (must
                                     Be an administrative, type 11 plan)
1-7            iopdes(2,1)         Destination Account, enter 1
```

Supply Data

```
1-8            ciopso(1)           Instream flow water right associated
                                     With the South Platte Compact

1-9            iopsou(2,1)         0
1-10           ciopso(2)           NA
1-11           iopsou(4,1)         0
```

Type Data

```
1-12           ityopr(1)           50
```

Associated Plan Data

```
1-13           creuse              NA
```

Diversion Type

```
1-14           cdivtyp             Diversion
```

Conveyance Loss (%)

```
1-15           OprLoss             0
```

Miscellaneous Limits

```
1-16           OprLimit            0
```

Start Date

```
1-17           IoBeg               First year of operation
```

End Date

```
1-18           IoEnd               Last year of operation
```

4.14 Precipitation File - Monthly (*.prm) or Annual (*.pra)

The evaporation file contains total monthly (12 values per simulation year) or annual (12 average values for every year) evaporation data. The type of data provided is controlled by the variable ***moneva*** from the control file. This file is read by subroutine MDAINP.

Row-data   Variable   Description

Control Data

```
1                                  Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1            ibm                 Beginning month of data (e.g. 1=Jan)
1-2            iby                 Beginning year of data (e.g. 1975)
1-3            iem                 Ending month of data
1-4            iey                 Ending year of data
1-5            cunit               Units of data
                                      ('FT' or 'IN')
```

```
1-6             cyr                 Year type
                                       'CYR'= calendar year (1-12)
                                       'WYR'= water year (10-9)
                                       'IYR'= irrigation year (11-12)
```

Time Series Data

```
2                                   Format (i4, 1x, a12, 12f8.2)
2-1             ipyr                Year
2-2             cpreid              Precipitation station ID
2-3             preprt(1-12,1)      Precipitation (in) for months 1-12
```

Repeat for the number of stations numpre

Repeat for each year of the simulation

4.15 Evaporation File - Monthly (*.evm) or Annual (*.eva)

The evaporation file contains total monthly (12 values per simulation year) or annual (12 average values for every year) evaporation data. The type of data provided is controlled by the variable ***moneva*** from the control file. An example is provided in Appendix A. This file is read by subroutine MDAINP.

Row-data | **Variable** | **Description**

Control Data

```
1                                   Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1             ibm                 Beginning month of data
                                    Enter 1 for January, 10 for October, etc.

1-2             iby                 Beginning year of data
                                    For monthly data, enter the year (e.g. 1975)
                                    For annual data, enter 0
1-3             iem                 Ending month of data
1-4             iey                 Ending year of data
1-5             cunit               Units of data
                                       ('FT' or 'IN')
1-6             cyr                 Year type
                                       'CYR'= calendar year (1-12)
                                       'WYR'= water year (10-9)
                                       'IYR'= irrigation year (11-12)
```

Time Series Data

```
2                                   Format (i4, 1x, a12, 12f8.2)
2-1             ieyr                Year
2-2             cevaid              Evaporation station ID
3-3             evaprt(1-12,1)      Evaporation for months 1-12
```

Repeat for the number ofstations numeva

Repeat for each year of the simulation

4.16 Stream Flow File - Monthly (*.rim or *.xbm)

The streamflow file may contain total baseflows or gains for each month of the simulation period. The control variable ***iopflo*** identifies which is expected; total baseflow (1) or gains (2). When this file is generated outside Statemod or is generated by Statemod and saved for historic purposes, it is commonly named *.rim. When this file is generated by the Statemod baseflow module it is typically named *.xbm. The user is recommended to rename a StateMod generated baseflow file named *.xbm to *.rim to ensure the preservation of a historic baseflow file and a continuous flow of results from the baseflow module to the simulation module. An example is provided in Appendix A. This file is read by subroutine MDAINP.

```
Row-data       Variable          Description

Control Data
1                                Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1            ibm               Beginning month of data (e.g. 1=Jan)

1-2            iby               Beginning year of data (e.g. 1975)
1-3            iem               Ending month of data
1-4            iey               Ending year of data
1-5            cunit             Units of data
                                    (' ACFT' or 'CFS')
1-6            cyr               Year type
                                    'CYR'= calendar year (1-12)
                                    'WYR'= water year (10-9)
                                    'IYR'= irrigation year (11-12)

Time Series Data
2                                Format (i4, 1x, a12, 12f8.0)
2-1            iryr              Year
2-2            cistat            Streamflow station ID
2-3            runoff(1-12,1)    Streamflow or gain (AF) for months 1-12

Repeat for the number of stations numrun

Repeat for each year of the simulation
```

4.17 Direct Flow Demand File - Monthly (*.ddm)

The monthly direct flow demand file contains demands for direct diversions for each month of the simulation period. Monthly data is required when the diversion station variable ***idvcom*** is set to 1 (monthly total demand) or 3 (monthly irrigation water requirement). Data should be entered in the order of the structure file (*.dds). See Section 7.10 for a discussion of various approaches available for specifying demand data; demands may be specified as a total at the headgate or as a consumptive irrigation water requirement at the farm. An example is provided in Appendix A. This file is read by subroutine MDAINP.

```
Row-data       Variable          Description

Control Data
1                                Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1            ibm               Beginning month of data (e.g. 1=Jan)
1-2            iby               Beginning year of data (e.g. 1975)
1-3            iem               Ending month of data
1-4            iey               Ending year of data
1-5            cunit             Units of data
                                    (' ACFT' or 'CFS')
1-6            cyr               Year type
                                    'CYR'= calendar year (1-12)
                                    'WYR'= water year (10-9)
```

'IYR'= irrigation year (11-12)

Time Series Data

2		Format (i4, 1x, a12, 12f8.0)
2-1	idyr	Year
2-2	cistat	Demand station ID
2-3	diverm(1-12,1)	Demands (AF) for months 1-12

Repeat for the number of stations numdiv

Repeat for each year of the simulation

4.18 Direct Flow Demand File - Annual (*.dda)

The annual direct flow demand file contains twelve constant demands which are repeated for each year of the study period. Annual data is required when the diversion station variable ***idvcom*** is set to 2 (annual total demand) or 4 (annual irrigation water requirement). Data should be entered in the order of the structure file (*.dds). An example is provided in Appendix A. This file is read by subroutine MDAINP.

Row-data	**Variable**	**Description**
Control Data		
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)
1-2	iby	Beginning year of data (e.g. 1975)
1-3	iem	Ending month of data
1-4	iey	Ending year of data
1-5	cunit	Units of data (' ACFT' or 'CFS')
1-6	cyr	Year type 'CYR'= calendar year (1-12) 'WYR'= water year (10-9) 'IYR'= irrigation year (11-12)
Time Series Data		
2		Format (5x, a12, 12f8.0)
2-1	cistat	Demand station ID
2-2	diverm(1-12)	Demands (AF) for months 1-12

Repeat for the number of stations

4.19 Direct Flow Demand Overwrite File - Monthly (*.ddo)

The direct flow demand overwrite file contains monthly demands for each year of the study period for selected structures. This file allows a what if scenario to be evaluated quickly without revising the direct flow demand file. An example is provided in Appendix A. This file is read by subroutine MDAINP.

Row-data	**Variable**	**Description**
Format (i4, 1x, a12, 12f8.0)		
1-1	idyr	Year
1-2	cistat	Demand station ID

```
1-3            diverm(1-12)      Demands (AF) for months 1-12
```

```
Repeat for the number of stations to be overridden

Repeat for each year of the simulation
```

4.20 Instream Flow Demand - Monthly (*.ifm)

The monthly instream flow demand file contains instream flow demands for each month of the simulation period. Data should be entered in the order of the structure file (*.ifs). To allow StateMod to be backward compatible with old data sets, this file is required only when monthly data is required (e.g. when the instream flow station (*.ifs) file variable ***iifcom*** is set to 1).

Note negative monthly demands are estimated to be a forecast which is currently only used by the Rio Grande compact simulations (see operation rule types 17 and 18). Also for use by the Rio Grande compact the variable ***rspilx*** may be used to specify the month when a spill occurred and the prorated portion of the spill attributed to Colorado.

Data should be entered by year with stations in any order. An example is provided in Appendix A. This file is read by subroutine MDAINP.

```
Row-data       Variable          Description

Control Data
1                                Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1            ibm               Beginning month of data (e.g. 1=Jan)
1-2            iby               Beginning year of data (e.g. 1975)
1-3            iem               Ending month of data
1-4            iey               Ending year of data
1-5            cunit             Units of data
                                    (' ACFT' or ' CFS')
1-6            cyr               Year type
                                    ' CYR'= calendar year (1-12)
                                    ' WYR'= water year (10-9)
                                    ' IYR'= irrigation year (11-12)

Time Series Data
2                                Format (i4, 1x, a12, 12f8.0, 10x,
                                          f8.2)
2-1            idyr              Year
2-2            cistat            Demand station ID
2-3            diverm(1-12,1)    Demands (AF) for months 1-12
                                 A negative number is treated as a forecast

Repeat for the number of instream flow stations

Repeat for each year of the simulation
```

(1) Note rspilx is only used by the Rio Grande operating rules (types 17 and 18).

4.21 Instream Flow Demand - Annual (*.ifa)

The instream flow demand file contains 12 monthly instream flow demands for use each year of the simulation. Data should be entered in the order of the structure file (*.ifs). An example is provided in Appendix A. This file is read by subroutine MDAINP.

```
Row-data        Variable            Description

Control Data
1                                   Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1             ibm                 Beginning month of data (e.g. 1=Jan)
1-2             iby                 Beginning year of data (e.g. 0 for annual data)
1-3             iem                 Ending month of data
1-4             iey                 Ending year of data
1-5             cunit               Units of data
                                       (' ACFT' or 'CFS')
1-6             cyr                 Year type
                                       'CYR'= calendar year (1-12)
                                       'WYR'= water year (10-9)
                                       'IYR'= irrigation year (11-12)

Time Series Data
2                                   Format (5x, a12, 12f8.0)
2-1             cistat              Instream Flow station ID
2-2             flowr(1-12,1)       Instream flow requirement for months 1-12

Repeat for the number of stations numifr

Repeat for each year of the simulation
```

4.22 Well Demand File - Monthly (*.wem)

The monthly well demand file contains demands for well structures for each month of the simulation period. Data may be entered in any order (i.e. its order is independent of the structure file). Monthly data is required when the diversion station variable ***idvcom*** is set to 1 (monthly total demand) or 3 (monthly irrigation water requirement). Note when a well structure is tied to a diversion the total demand is provided in the direct diversion station file and no monthly well demand data is required. This approach should have the control file (.ctl) variable ***icondem*** set to 6. See Section 7.10 for a discussion of various approaches available for specifying demand data; demands may be specified as a total at the headgate or as a consumptive irrigation water requirement at the farm. An example is provided in Appendix A. This file is read by subroutine MDAINP.

```
Row-data        Variable            Description

Control Data
1                                   Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1             ibm                 Beginning month of data (e.g. 1=Jan)
1-2             iby                 Beginning year of data (e.g. 1975)
1-3             iem                 Ending month of data
1-4             iey                 Ending year of data
1-5             cunit               Units of data
                                       (' ACFT' or 'CFS')
1-6             cyr                 Year type
                                       'CYR'= calendar year (1-12)
```

```
                                    'WYR'= water year (10-9)
                                    'IYR'= irrigation year (11-12)
```

Time Series Data

```
2                                 Format (i4, 1x, a12, 12f8.0)
2-1             idyr              Year
2-2             cistatw           Demand station ID
2-3             divermw(1-12,1)   Demands (AF) for months 1-12

Repeat for the number of stations numdivw

Repeat for each year of the simulation
```

4.23 Delay (Return Flow) Table - Monthly (*.urm)

The monthly unit response table file contains coefficients to lag return flows. If the variable ***interv*** of the control file is a positive value, then interv values are expected for every pattern. If variable ***interv*** of the control file is a -1, then the number of values are specified for each pattern. Note a daily model (control file variable ***iday=1***) requires a variable number of return values be provided (variable ***interv*** must be negative). An example is provided in Appendix A. This file is read by subroutine MDAINP.

Row-data **Variable** **Description**

Control Data

```
1                                 Format (free)
1-1             idly              Delay table ID
1-2             ndly(1)           Number of entries in delay table idly
                                  Include only if variable interv of the
                                     control file is equal to -1
```

Delay Data

```
1-3             dlyrat(j,1)       Delay factor for time period j
                                  Include as a percent if variable
                                     Interv of the control file is
                                     positive or equal to -1
                                  Include as a decimal if variable
                                     Interv of the control file is equal
                                     to -100

                                  Include ndly or interv delay entries

                                  Repeat for the number of delay tables used
                                  in the diversion station file
```

4.24 Reservoir Target File - Monthly (*.tar)

The reservoir target file contains monthly targets for a reservoir's minimum and maximum contents. Data should be entered in the order of the structure (*.res) file. Positive maximum contents are end of month targets. Negative values are forecasted inflows. When forecasted inflows are provided the monthly target is estimated as follows:

Target (im) = Current Storage (im) - (Current Storage (im) - Forecast (im) - End Target) / (Months Remaining +1);

Where:

Target (im) is the reservoir target.
Current Storage (im) is the total reservoir storage in month im.
Forecast (im) is the total inflow for the remaining forecast period. Note for a linear forecast this term is often set to -1.
End Target is the target at the end of the forecast period.
Months remaining is the total of all months remaining to be forecasted in a year.

For example, if the forecast data for April - July = 1,000, -1 -1 700 and the Current Storage in April = 1000. Then the Target in May is:

1000 - (1000 - 1 -700)/3 = 900. An example reservoir target file is provided in Appendix A. This file is read by subroutine MDAINP.

```
Row-data        Variable            Description

Control Data
1                                   Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1             ibm                 Beginning month of data (e.g. 1=Jan)
1-2             iby                 Beginning year of data (e.g. 1975)
1-3             iem                 Ending month of data
1-4             iey                 Ending year of data
1-5             cunit               Units of data
                                       (' ACFT' or 'CFS')
1-6             cyr                 Year type
                                       'CYR'= calendar year (1-12)
                                       'WYR'= water year (10-9)
                                       'IYR'= irrigation year (11-12)

Time Series Data
2                                   Format (i4, 1x, a12, 12f8.0, 10x,
                                             f8.2)
2-1             iyr                 Year
2-2             cistat              Reservoir station ID
2-3             conmin(1-12,1)      Minimum reservoir targets (AF) for months
                                       1-12

Time Series Data
3-1             iyr                 Year
3-2             xista2              Reservoir station ID
3-3             targetx(1-12,1)     Positive values equal the maximum reservoir
                                       targets (AF) by month. Negative values equal
                                       the forecasted inflow for future months

Repeat for the number of stations numres

Repeat for each year of the simulation
```

4.25 Historic Reservoir Content File - Monthly (*.eom)

The historic reservoir content file (*.eom) contains end of month reservoir content data for each year of the study period. Data should be entered in the order of the structure (*.res) file. This data is only used by the Base Flow module to simulate reservoir storage and evaporation impacts on gaged stream flows. It is used by the report module to compare simulated results to gaged observations. An example is provided in Appendix A. This file is read by subroutine VIRGEN.

Row-data	Variable	Description
Control Data		
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)
1-2	iby	Beginning year of data (e.g. 1975)
1-3	iem	Ending month of data
1-4	iey	Ending year of data
1-5	cunit	Units of data (' ACFT' or 'CFS')
1-6	cyr	Year type 'CYR'= calendar year (1-12) 'WYR'= water year (10-9) 'IYR'= irrigation year (11-12)
Time Series Data		
2		Format (i4, 1x, a12, 12f8.0)
2-1	iryr	Year
2-2	cistat	Reservoir station ID
2-3	resvol(1-12,1)	End of Month reservoir contents

Repeat for the number of stations numres

Repeat for each year of the simulation

4.26 Base Flow Data (*.rib)

Base flow data is used by the baseflow module to estimate base flows at river nodes that do not have hisoric records using the following formula:

```
FlowX= (FlowB(1)*coefB(1) + FlowB(2)*coefB(2)+ ....) +
kpf * (FlowG(1)*coefG(1) + FlowG(2)*coefG(2)+ ....)

Where:
   FlowX=      Flow at intermediate node to be estimated

   FlowB=      Base flow station(s)
   FlowG=      Gain flow station(s)

   pf=         Proration factor for gain term
   coefB=      Base flow coefficient
   coefG=      Gain flow coefficient
```

The first term ((FlowB(1)*coefB(1) + FlowB(2)*coefB(2)+ ....) typically represents upstream gaged flows. The second term (pf * (FlowG(1)*coefG(1) + FlowG(2)*coefG(2)+ ....) typically represents the gain between gages. An example is provided in Appendix A. This file is read by subroutine VIRGEN.

Row-data	Variable	Description
Base Station Data		
1		Format (a12, 8x, i8, 10(f8.3, 1x, a12)
1-1	FlowN	Intermediate river node ID
1-2	mbase	Number of base stations to follow
1-3	coefB(1)	Base flow coefficient
1-4	FlowB(1)	Base station ID

Repeat for the number of gaged flows (mbase)

Proration Data

2		Format (12x, f8.2, i8, 10(f8.3, 1x, a12)
2-1	pf	Proration factor for gain term
2-2	nbase	Number of gain stations to follow
2-3	coefG(1)	Base flow coefficient
2-4	FlowG(1)	Base station ID

Repeat for the number of gain stations flows (nbase)

Repeat for the number of intermediate nodes where base flows are to be estimated

4.27 Historic Streamflow File - Monthly (*.rih)

The monthly historic streamflow file is used by the baseflow module to estimate Base flows at gaged and ungaged locations. The monthly historic streamflow file is also used by the report module to compare simulated results to gaged observations. Note, the base flow module may be executed with missing streamflow data (specified by -999) to allow mans impact to be removed prior to filling missing data gaps using a technique such as regression. An example is provided in Appendix A. This file is read by subroutine VIRGEN.

Row-data	**Variable**	**Description**
Control Data		
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)
1-2	iby	Beginning year of data (e.g. 1975)
1-3	iem	Ending month of data
1-4	iey	Ending year of data
1-5	cunit	Units of data (' ACFT' or 'CFS')
1-6	cyr	Year type 'CYR'= calendar year (1-12) 'WYR'= water year (10-9) 'IYR'= irrigation year (11-12)
Time Series Data		
2		Format (i4, 1x, a12, 12f8.0)
2-1	iryr	Year
2-2	cistat	Demand station ID
2-3	runoff(1-12,1)	Gaged streamflow for months 1-12 Enter -999 to indicate missing data

Repeat for the number of gages provided in the river station file (Section 4.4)

Repeat for each year of the simulation

4.28 Historic Diversion File - Monthly (*.ddh)

The monthly historic diversion file is used by the baseflow module to estimate Base flows at gaged and ungaged locations. It is used by the report module to compare simulated results to gaged observations. An example is provided in Appendix A. This file is read by subroutine VIRGEN.

Row-data	Variable	Description
Control Data		
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)
1-2	iby	Beginning year of data (e.g. 1975)
1-3	iem	Ending month of data
1-4	iey	Ending year of data
1-5	cunit	Units of data (' ACFT' or 'CFS')
1-6	cyr	Year type 'CYR'= calendar year (1-12) 'WYR'= water year (10-9) 'IYR'= irrigation year (11-12)
Time Series Data		
2		Format (i4, 1x, a12, 12f8.0)
2-1	idyr	Year
2-2	cistat	Demand station ID
2-3	diverm(1-12,1)	Recorded diversions for months 1-12

Repeat for the number of demand structures provided in the structure file (Section 4.5)

Repeat for each year of the simulation

4.29 Historic Well Pumping File - Monthly (*.weh)

The monthly historic well pumping file is used by the baseflow module to estimate Base flows at gaged and ungaged locations. It is used by the report module to compare simulated results to gaged observations. An example is provided in Appendix A. This file is read by subroutine VIRGEN.

Row-data	Variable	Description
Control Data		
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)
1-2	iby	Beginning year of data (e.g. 1975)
1-3	iem	Ending month of data
1-4	iey	Ending year of data
1-5	cunit	Units of data (' ACFT' or 'CFS')
1-6	cyr	Year type 'CYR'= calendar year (1-12) 'WYR'= water year (10-9) 'IYR'= irrigation year (11-12)
Time Series Data		
2		Format (i4, 1x, a12, 12f8.0)
2-1	idyr	Year
2-2	cistatw	Well station ID

```
2-3            divermw(1-12,1)   Well pumping for months 1-12

Repeat for the number of wells provided in      the structure file (Section 4.9)

Repeat for each year of the simulation
```

4.30 San Juan Recovery Plan (SJRIP) Sedimentation - Annual (*.sjr)

The annual SJRIP sedimentation plan file includes perturbation data for use by the SJRIP operating rule (Type 20). It is only used when the control file (*.ctl) variable isjrip >= 1. An example is provided in Appendix A. This file is read by subroutine MDAINP.

```
Row-data       Variable            Description

Control Data
1                                  Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1            ibm                 Beginning month of data (e.g. 1=Jan)
1-2            iby                 Beginning year of data (e.g. 1975)
1-3            iem                 Ending month of data
1-4            iey                 Ending year of data
1-5            cunit               Units of data (Not used)
                                      (' ACFT' or 'CFS')
1-6            cyr                 Year type
                                      'CYR'= calendar year (1-12)
                                      'WYR'= water year (10-9)
                                      'IYR'= irrigation year (11-10)

Time Series Data
2                                  Free Format
2-1            idly                year
2-2            ndly(1)             0 No sediment perturbation
                                   1 Yes sediment perturbation
```

4.31 Irrigation Parameter Yearly Data File - Annual (*.ipy)

The annual CU time series file contains information required to perform calculations using a variable efficiency approach. It is only used when the control file (*.ctl) variable itsfile >= 1. It is formatted exactly the same as the annual time series file used by the consumptive use model (StateCU). The current standard is to provide four water supply irrigation method combinations (Surface Supply Flood Irrigation, Surface Supply Sprinkler Irrigation, Ground Supply Flood Irrigation and Ground Supply Sprinkler Irrigation). For a description of the old (*.ipy file) format, which StateMod still supports, see the chapter titled **10.0 Discontinued but Supported File Formats.**

Because multiple input file formats may be provided it is recommended the following string be provided near the top of the file before any data: # FileFormatVersion 2. If the format version indicator is not provided StateMod will try to read the file and try to determine the appropriate file type

```
Row-data       Variable            Description

Control Data
1                                  Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1            ibm                 Beginning month of data (e.g. 1=Jan)
```

```
1-2            iby                 Beginning year of data (e.g. 1975)
1-3            iem                 Ending month of data
1-4            iey                 Ending year of data
1-5            cunit               Units of data ('NA')
1-6            cyr                 Year type
                                      'CYR'= calendar year (1-12)
                                      'WYR'= water year (10-9)
                                      'IYR'= irrigation year (11-10)
```

Time Series Data

```
2                                  Format (i4,1x,a12,3f6.0,2f8.0,f12.0,f3.0,f8.0)
2-1            idly                Year
2-2            ID                  Structure ID
2-3            ceff                Conveyance efficiency (decimal)
2-4            feff                Maximum flood efficiency (decimal)
2-5            seff                Maximum sprinkler efficiency (decimal)
2-6            AcreSF              Acres with a Surface Water Supply and Flood Irrigation
2-7            AreaSS              Acres with a Surface Water Supply and Sprinkler Irrigation
2-6            AcreGF              Acres with a Ground Water Supply and Flood Irrigation
2-7            AreaG               Acres with a Ground Water Supply and Flood Irrigation
2-8            mprate              Maximum pumping rate (af/mo)
2-9            gwmode              Ground water use mode (see Section 7.10)
                                      1 = maximum supply mode
                                      2 = mutual ditch supply mode
2-10           areax               Total Irrigated acreage for year idly (ac)
```

4.32 Consumptive Water Requirement File - Monthly (*.ddc)

The monthly consumptive water requirement (*.ddc) file contains the consumptive requirement for direct diversion and well only structures for each month of the simulation period. For an irrigation structure the consumptive water requirement is commonly called the Irrigation Water Requirement (IWR). Regardless if the structure is used for irrigation or municipal or industrial use the consumptive water requirement is the amount of water that would be consumed by that structure (e.g. no losses or inefficiencies are included). It is only used when the control file (*.ctl) variable efficiency variable (*ieffmax)* = 1. Data should be provided for every diversion and well only structure. If data is inadvertently provided for a Well structures that is also served by both Surface water the data provided under the Diversion ID is used. When data is not provided (e.g. for a municipal or non consumptive demand) the CU requirement is set to the structures demand / average efficiency provided in the diversion station (*.dds) file or well station (*.wes) file, respectively. Data can be entered in any order. An example is provided in Appendix A. This file is read by subroutine MDAINP.

Row-data   Variable   Description

Control Data

```
1                                  Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1            ibm                 Beginning month of data (e.g. 1=Jan)
1-2            iby                 Beginning year of data (e.g. 1975)
1-3            iem                 Ending month of data
1-4            iey                 Ending year of data
1-5            cunit               Units of data ('CFS')
1-6            cyr                 Year type
                                      'CYR'= calendar year (1-12)
                                      'WYR'= water year (10-9)
                                      'IYR'= irrigation year (11-10)
```

Time Series Data

```
2                               Format (i4, 1x, a12, 12f8.0)
2-1            idyr             Year
2-2            cistat           Demand station ID
2-3            diverm(1-12,1)   CU requirement(AF) for months 1-12

Repeat for the number of diversion and Well only stations

Repeat for each year of the simulation
```

4.33 Soil Moisture (StateCU_Structure) File (*.str)

The soil moisture file is the same as the current StateCU structure file. Note that StateMod versions 10.30 and greater use this in order to be consistent with recent StateCU enhancements. For a description of the old (*.str file) format, which StateMod still supports, see the chapter titled **10.0 Discontinued but Supported File Formats**.

The StateCU structure file (*.str) contains consumptive use parameters by structure that do not change with time. Only the soil moisture data (*.awc) is used by StateMod in order to perform soil moisture accounting. Other consumptive use information contained in the file (e.g. latitude, location, associated climate stations, etc.) are currently not used.

The soil moisture reservoir available to each structure is the parameter *awc* multiplied by the structures area, multiplied by average depth for every structure in the system specified in the control file (*.ctl) by variable *soild* (feet). It is formatted exactly the same as the soil parameter file used by the consumptive use model (StateCU), therefore it often contains data before or beyond the variable *awc*that is not used by StateMod. Data can be entered in any order. An example is provided in Appendix A. This file is read by subroutine MDAINP during the first year and month of the simulation only.

Because multiple input file formats may be provided it is recommended the following string be provided near the top of the file before any data: # FileFormatVersion 2. If the format version indicator is not provided StateMod will try to read the file and determine the appropriate file type.

```
Format(a12, 71x, i4, f8.0)

Row-data       Variable         Description

Control Data
1                               Format (i4, 1x, a12, 12f8.0)
1-1            cistat           Station ID
1-2            dum              Latitude
1-3            dum              Elevation
1-4            dum              Region1 (e.g. County)
1-5            dum              Region2 (e.g. Hydrologic unit)
1-6            dum              Structure Name
1-6            ncli             # of climate stations
1-7            awc              Available water content (fraction)

Format(a12,f6.2,f9.2)
2-1            dum              Climate ID
2-2            dum              Temperature station weight
2-3            dum              Precipitation station weight

Repeat for the number of stations ncli
```

4.34 GIS File (*.gis)

The *.gis file contains reference to files which contain GIS data related to structures and maps used by the Graphic User Interface. An example is provided in Appendix A.

```
Type            Variable            Description

Control Data
1Format (data type: file name (1))
streamflow:     filena             streamflow gage file name
diversion:      filena             diversion location file name
reservoirs:     filena             reservoir location file
precipitation: filena             precipitation station location file name
basin:          filena             basin file name
rivers:         filena             hydrology file name
```

4.35 Output Request (*.out)

The output request file contains data which will limit the extent of selected output file requests. Note, the first two rows of data (variables ftype and parameter) are only used by the special printout request (*.xsp). Rows 3 through n contain reference data for the structure(s) to be printed and are used by the standard printout reports (*.xdd, *.xre, *.xir, *.xwe and *.xop). To eliminate the need to type an output request file, one is automatically generated by the check option (-check) for every type of structure in the system. Note the default name for that file is *.xou. It is commonly renamed to *.out and referenced as such in the response file to avoid it being overwritten whenever a new check run is made. Also the structures to be printed by that file default to print nodes where inflow occurs (FLO) and not print other types of nodes (DIV, RES, ISF, WEL, OTH). An example is provided in Appendix A.

```
Row-data        Variable           Description

Control Data
1                                  Format (a72)
1-1             ftype              Output type switch
                                   Diversion
                                   Instream Flow
                                   StreamGage
                                   Reservoir
                                   Well

Parameter Data
2                                  Format (a72)
2-1             Parameter          For ftype = Diversion, Instream Flow or StreamGage
                                   Total_Demand
                                   CU_Demand
                                   From_River_By_Priority
                                   From_River_By_Storage
                                   From_River_By_Exchange
                                   From_Well
                                   From_Carrier_By_Priority
                                   From_Carrier_By_Storage
                                   Carried_Water
                                   From_Soil
                                   Total_Supply
```

		Total_Short
		CU_Short
		Consumptive_Use
		To_Soil
		Total_Return
		Upstream_Inflow
		Reach_Gain
		Return_Flow
		Well_Depletion
		To_From_GW_Storage
		River_Inflow
		River_Divert
		River_By_Well
		River_Outflow
		Available_Flow
		For ftype = Reservoir
		Initial_Storage
		River_Priority
		River_Storage
		River_Exchange
		Carrier_Priority
		Carrier_Storage
		Total_Supply
		Storage_Use
		Storage_Exchange
		Carrier_Use
		Total_Release
		Evap
		Seep_Spill
		Sim_EOM
		Target_Limit
		Fill_Limit
		River_Inflow
		Total_Release
		Total_Supply
		River_By_Well
		River_Outflow
		For ftype = Well
		Demand
		FromWell
		Short
		ConsumptiveWaterUse
		Return
		Loss
		FromRiver
		FromGWStor
		FromSalvage
3		Format (a12,1x,a24,1x,a3,1x,i5)
3-1	idreq	Requested ID Enter ALL, All, all or 0 to get all Enter -999 to indicate last ID requested)
3-2	rec24	Requested structure name
3-3	idtypx	Requested structure type
3-4	ix	Print switch 0 do not print 1 print

Repeat for each structure

4.36 Streamflow File - Daily (*.rid)

The daily streamflow file contains baseflows or a daily pattern for each day of the simulation period. To simplify the preparation of daily data, StateMod allows the user to provide daily data or a pattern to be used with monthly data. When the daily river station variable ***crunidy*** is set to 3 the river station variable ***crunid*** is used to indicate daily data controls and any monthly data provided in the monthly streamflow file (*.rim or *.xbm) is ignored. When the river station variable ***crunidy*** is set to any ID including its own StateMod uses daily data as a pattern to estimate daily data from monthly data as follows:

Qd = Dp * Qm / Dm

Where:
Qd = daily estimated flow
Dp = daily flow (pattern)
Qm = monthly flow from the monthly flow file (*.rim)
Dm = monthly sum of daily flow (pattern)

This file is only required if the model is operated in a daily mode. Data can be entered with stations entered in any order. An example is provided in Appendix B. This file is read by subroutine DAYDATA.

Row-data	**Variable**	**Description**
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)
1-2	iby	Beginning year of data (e.g. 1975)
1-3	iem	Ending month of data
1-4	iey	Ending year of data
1-5	cunit	Units of data ('CFS')
1-6	cyr	Year type 'CYR'= calendar year (1-12) 'WYR'= water year (10-9) 'IYR'= irrigation year (11-12)
Time Series Data		
2		Format (i4, i4, 1x, a12, 31f8.0, f8.0)
2-1	idyr	Year
2-2	cistat	Daily station ID
2-3	virindx(1-31)	Streamflow (cfs) or pattern (unitless) for days 1-31, etc.

Repeat for the number of stream gage stations

Repeat for each year of the simulation

4.37 Direct Flow Demand File - Daily (*.ddd)

The daily direct flow demand file contains direct diversion demands or a daily pattern for each day of the simulation period. Data should be entered in the order of the structure file (*.dds). To simplify the preparation of daily data, StateMod allows the user to provide daily data or a pattern to be used with monthly data. When the diversion station variable ***cdividy*** is set to 3 the diversion station variable ***cdivid*** is used to indicate daily data controls and any monthly data provided in the monthly direct flow demand file (*.ddm) is ignored. When the diversion station variable ***cdividy*** is set to any ID including its own (**cdivid**) StateMod uses daily data as a pattern to estimate daily data from monthly data using the same approach described under daily streamflow data (Section 4.36).

This file is only required if the model is operated in a daily mode. Data can be entered with stations entered in any order. An example is provided in Appendix B. This file is read by subroutine DAYDATA.

Row-data	Variable	Description
Control Data		
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)
1-2	iby	Beginning year of data (e.g. 1975)
1-3	iem	Ending month of data
1-4	iey	Ending year of data
1-5	cunit	Units of data ('CFS')
1-6	cyr	Year type 'CYR'= calendar year (1-12) 'WYR'= water year (10-9) 'IYR'= irrigation year (11-12)
Time Series Data		
2		Format (i4, i4, 1x, a12, 31f8.2, f8.0)
2-1	iy	Year
2-2	im	Month
2-2	cdividx	Daily station ID
2-3	diverdx(1-31)	Demand (cfs) or pattern (unitless) for days 1-31, etc.

Repeat for the number of stations numdiv

Repeat for each year of the simulation

4.38 Instream Flow Demand File - Daily (*.ifd)

The daily instream flow demand file contains instream flow demands or a daily pattern for each day of the simulation period. Data should be entered in the order of the structure file (*.ifs). To simplify the preparation of daily data, StateMod allows the user to provide daily data or a pattern to be used with monthly data. When the instream flow station variable ***cifridy*** is set to 3 the instream flow station variable ***cifrid*** is used to indicate daily data controls and any monthly data provided in the annual instream flow demand file (*.ifa) is ignored. When the diversion station variable ***cifridy*** is set to any ID including its own (***cifrid)*** StateMod uses daily data as a pattern to estimate daily data from monthly data using the same approach described under daily streamflow data (Section 4.36).

This file is only required if the model is operated in a daily mode. Data can be entered with stations entered in any order. An example is provided in Appendix B. This file is read by subroutine DAYDATA.

Row-data	Variable	Description
Control Data		
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)

```
1-2             iby                 Beginning year of data (e.g. 1975)
1-3             iem                 Ending month of data
1-4             iey                 Ending year of data
1-5             cunit               Units of data
                                    (' ACFT' or 'CFS')
1-6             cyr                 Year type
                                       'CYR'= calendar year (1-12)
                                       'WYR'= water year (10-9)
                                       'IYR'= irrigation year (11-12)
```

Time Series Data

```
2                                   Format (i4, i4, 1x, a12, 31f8.2, f8.0)
2-1             iy                  Year
2-2             im                  Month
2-2             cifridx             Daily station ID
2-3             flowrx(1-31)        Demand (cfs) or pattern (unitless) for days
                                       1-31, etc.

Repeat for the number of instream flows stations

Repeat for each year of the simulation
```

4.39 Well Demand File - Daily (*.wed)

The daily well demand file contains well demands or a daily pattern for each day of the simulation period. To simplify the preparation of daily data, StateMod allows the user to provide daily data or a pattern to be used with monthly data. When the well station variable ***cdividwy*** is set to 3 the well station variable ***cdividw*** is used to indicate daily data controls and any monthly data provided in the monthly direct flow demand file (*.wem) is ignored. When the diversion station variable ***cdividwy*** is set to any ID including its own (***cdividw)*** StateMod uses daily data as a pattern to estimate daily data from monthly data using the same approach described under daily streamflow data (Section 4.36).

This file is only required if the model is operated in a daily mode with wells on (control file variable *iwell*=1). Data can be entered with stations entered in any order. An example is provided in Appendix B. This file is read by subroutine DAYDATA.

Row-data   Variable   Description

Control Data

```
1                                   Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1             ibm                 Beginning month of data (e.g. 1=Jan)
1-2             iby                 Beginning year of data (e.g. 1975)
1-3             iem                 Ending month of data
1-4             iey                 Ending year of data
1-5             cunit               Units of data ('CFS')
1-6             cyr                 Year type
                                       'CYR'= calendar year (1-12)
                                       'WYR'= water year (10-9)
                                       'IYR'= irrigation year (11-12)
```

Time Series Data

```
2                                   Format (i4, i4, 1x, a12, 31f8.2, f8.0)
2-1             iy                  Year
2-2             im                  Month
2-2             cdividxw            Daily station ID
2-3             diverdxw(1-31)      Demand (cfs) or pattern (unitless) for days 1-31, etc.
```

```
Repeat for the number of wells

Repeat for each year of the simulation
```

4.40 Reservoir Target Content File - Daily (*.tad)

The daily reservoir target file contains reservoir targets or a daily pattern for each day of the simulation period. Data should be entered in the order of the structure (*.res) file. To simplify the preparation of daily data, StateMod allows the user to provide daily data or a pattern to be used with monthly data. When the reservoir station variable ***cresidy*** is set to 3 the reservoir station variable ***cresid*** is used to indicate daily data controls and any monthly data provided in the monthly direct flow demand file (*.tar) is ignored. When the reservoir station variable ***cresidy*** is set to any ID including its own (***cresid)*** StateMod uses daily data as a pattern to estimate daily data from monthly data using the same approach described under daily streamflow data (Section 4.36).

This file only required if the model is operated in a daily mode. Data can be entered with stations entered in any order. An example is provided in Appendix B. This file is read by subroutine DAYDATA.

```
Row-data        Variable          Description

Control Data
1                                 Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1             ibm               Beginning month of data (e.g. 1=Jan)
1-2             iby               Beginning year of data (e.g. 1975)
1-3             iem               Ending month of data
1-4             iey               Ending year of data
1-5             cunit             Units of data (' ACFT')
1-6             cyr               Year type
                                     'CYR'= calendar year (1-12)
                                     'WYR'= water year (10-9)
                                     'IYR'= irrigation year (11-12)

Time Series Data
2                                 Format (i4, i4, 1x, a12, 31f8.2, f8.0)
2-1             iy                Year
2-2             im                Month
2-2             cresidx           Daily station ID
2-3             targex2(1-31)     Maximum reservoir target (acft) or pattern for
                                     days 1-31

Repeat for the number of stations numres

Repeat for each year of the simulation
```

4.41 Irrigation Water Requirement File - Daily (*.ddx)

The daily consumptive water requirement (*.ddx) file contains the CU requirement for direct diversion and well only structures for each day of the simulation period. It is only used when the control file (*.ctl) variable efficiency control (*ieffmax)* = 1. To simplify the preparation of daily data, StateMod allows the user to provide daily data or a pattern to be used with monthly data. When the diversion station variable ***cdividy*** is set to the diversion station variable ***cdivid*** daily data controls and any monthly data provided in the monthly consumptive water requirement file (*.ddc) is ignored. When the river station variable ***cdividy*** is set to any ID other than its own direct flow station variable ***cdivid.*** StateMod uses daily data as a pattern to estimate daily data using the same approach described under daily streamflow data (Section 4.36).

This file is only required if the model is operated in a daily mode with variable efficiency (control file itsfile=1 or 10). Data can be entered with stations entered in any order. An example is provided in Appendix B. This file is read by subroutine DAYDATA.

Row-data	**Variable**	**Description**
Control Data		
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)
1-2	iby	Beginning year of data (e.g. 1975)
1-3	iem	Ending month of data
1-4	iey	Ending year of data
1-5	cunit	Units of data (' ACFT' or 'CFS')
1-6	cyr	Year type 'CYR'= calendar year (1-12) 'WYR'= water year (10-9) 'IYR'= irrigation year (11-12)
Time Series Data		
2		Format (i4, i4, 1x, a12, 31f8.2, f8.0)
2-1	iy	Year
2-2	im	Month
2-2	cresidx	Daily station ID
2-3	targex2(1-31)	Consumptive Water Requirement(cfs) or pattern for days 1-31

Repeat for the number of stations numdiv

Repeat for each year of the simulation

4.42 Delay Table File - Daily (*.dld)

The daily delay table file contains coefficients to lag return flows. If the variable ***interv*** of the control file is a positive value, then interv values are expected for every pattern and data is expects to be provided as a percent. If the variable ***interv*** of the control file is a -1, then the number of values are specified for each pattern and data is expected to be provided as a percent. If the variable ***interv*** of the control file is a -100, then the number of values are specified for each pattern and data is expected to be provided as a decimal. An example is provided in Appendix A. This file is read by subroutine MDAINP.

Row-data	**Variable**	**Description**
Control Data		
1		Format (a8, i4, (12f8.2))
1-1	idly	Delay table ID

```
1-2            ndly(1)             Number of entries in delay table idly
                                      Include only if variable interv of
                                         the control file is equal to -1
                                         or -100
1-3            dlyratd(j,1)        Delay factor for time period j
                                      Include as a percent if variable interv of
                                         the control file is positive or equal to -1
                                      Include as a decimal if variable interv
                                         of the control file is equal to
                                         –100
```

Include ndly or interv delay entries

Repeat for the number of delay tables used in the diversion station file

4.43 Historic Streamflow File - Daily (*.riy)

The daily historic streamflow file contains streamflows or a daily pattern for each day of the simulation period. To simplify the preparation of daily data, StateMod allows the user to provide daily data or a pattern to be used with monthly data. When the river station variable ***crunidy*** is set to 3 the river station variable ***crunid*** is used to indicate daily data controls and any monthly data provided in the monthly historic streamflow file (*.rih) is ignored. When the river station variable ***crunidy*** is set to any ID including its own (***crunid)*** StateMod uses daily data as a pattern to estimate daily data using the same approach described under daily streamflow data (Section 4.36).

This file is only required if the model is operated in a daily baseflow mode. Data can be entered with stations entered in any order. An example is provided in Appendix B. This file is read by subroutine DAYDATA.

Row-data	**Variable**	**Description**
Control Data		
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)
1-2	iby	Beginning year of data (e.g. 1975)
1-3	iem	Ending month of data
1-4	iey	Ending year of data
1-5	cunit	Units of data ('CFS')
1-6	cyr	Year type 'CYR'= calendar year (1-12) 'WYR'= water year (10-9) 'IYR'= irrigation year (11-12)
Time Series Data		
2		Format (i4, i4, 1x, a12, 31f8.0, f8.0)
2-1	idyr	Year
2-2	cistat	Daily station ID
2-3	virindx(1-31)	Historic Streamflow (cfs) or pattern (unitless) for days 1-31, etc.

Repeat for the number of stream gage stations

Repeat for each year of the simulation

4.44 Historic Diversion File - Daily (*.ddy)

The daily historic diversion file contains diversions or a daily pattern for each day of the simulation period. To simplify the preparation of daily data, StateMod allows the user to provide daily data or a pattern to be used with monthly data. When the diversion station variable ***cdividy*** is set to 3 the diversion station variable ***cdivid*** is used to indicate daily data controls and any monthly data provided in the monthly direct flow demand file (*.ddm) is ignored. When the diversion station variable ***cdividy*** is set to any ID including its own (***cdivid)*** StateMod uses daily data as a pattern to estimate daily data using the same approach described under daily streamflow data (Section 4.36).

This file is only required if the model is operated in a daily baseflow mode. Data can be entered with stations entered in any order. An example is provided in Appendix B. This file is read by subroutine DAYDATA.

```
Row-data        Variable          Description

Control Data
1                                 Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1             ibm               Beginning month of data (e.g. 1=Jan)
1-2             iby               Beginning year of data (e.g. 1975)
1-3             iem               Ending month of data
1-4             iey               Ending year of data
1-5             cunit             Units of data ('CFS')
1-6             cyr               Year type
                                     'CYR'= calendar year (1-12)
                                     'WYR'= water year (10-9)
                                     'IYR'= irrigation year (11-12)

Time Series Data
2                                 Format (i4, i4, 1x, a12, 31f8.2, f8.0)
2-1             iy                Year
2-2             im                Month
2-2             cdividx           Daily station ID
2-3             diverdx(1-31)     Historic diversion (cfs) or pattern
                                     (unitless) for days 1-31, etc.

Repeat for the number of stations numdiv

Repeat for each year of the simulation
```

4.45 Historic Well Pumping File - Daily (*.wey)

The daily historic well pumping file contains well pumping or a daily pattern for each day of the simulation period. To simplify the preparation of daily data, StateMod allows the user to provide daily data or a pattern to be used with monthly data. When the well station variable ***cdividyw*** is set to 3 the diversion station variable ***cdividw*** is used to indicate daily data controls and any monthly data provided in the monthly direct flow demand file (*.wem) is ignored. When the diversion station variable ***cdividwy*** is set to any ID including its own (***cdividw)*** StateMod uses daily data as a pattern to estimate daily data using the same approach described under daily streamflow data (Section 4.36).

This file is only required if the model is operated in a daily baseflow mode with wells. Data can be entered with stations entered in any order. An example is provided in Appendix B. This file is read by subroutine DAYDATA.

Row-data	Variable	Description
Control Data		
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)
1-2	iby	Beginning year of data (e.g. 1975)
1-3	iem	Ending month of data
1-4	iey	Ending year of data
1-5	cunit	Units of data ('CFS')
1-6	cyr	Year type 'CYR'= calendar year (1-12) 'WYR'= water year (10-9) 'IYR'= irrigation year (11-12)
Time Series Data		
2		Format (i4, i4, 1x, a12, 31f8.2, f8.0)
2-1	iy	Year
2-2	im	Month
2-2	cdividxw	Daily station ID
2-3	diverdxw(1-31)	Daily Pumping (cfs) or pattern (unitless) for days 1-31, etc.

Repeat for the number of wells

Repeat for each year of the simulation

4.46 Historic Reservoir Content File - Daily (*.eoy)

The daily historic reservoir content file contains reservoir contents at the end of the day or a daily pattern for each day of the simulation period. Data should be entered in the order of the structure (*.res) file. To simplify the preparation of daily data, StateMod allows the user to provide daily data or a pattern to be used with monthly data. When the reservoir station variable ***cresidy*** is set to 3 the reservoir station variable ***cresid*** is used to indicate daily data controls and any monthly data provided in the monthly direct flow demand file (*.tar) is ignored. When the reservoir station variable ***cresidy*** is set to any ID including its own (***cresid)*** StateMod uses the daily data as a pattern to estimate daily data using the same approach described under daily streamflow data (Section 4.36).

This file is only required if the model is operated in a daily baseflow mode. Data can be entered with stations entered in any order. An example is provided in Appendix B. This file is read by subroutine DAYDATA.

Row-data	Variable	Description
Control Data		
1		Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1	ibm	Beginning month of data (e.g. 1=Jan)
1-2	iby	Beginning year of data (e.g. 1975)
1-3	iem	Ending month of data
1-4	iey	Ending year of data
1-5	cunit	Units of data ('AF')
1-6	cyr	Year type 'CYR'= calendar year (1-12) 'WYR'= water year (10-9) 'IYR'= irrigation year (11-12)

Time Series Data

```
2                                Format (i4, i4, 1x, a12, 31f8.2, f8.0)
2-1            iy                Year
2-2            im                Month
2-2            cresidx           Daily station ID
2-3            targex2(1-31)     Daily reservoir target (acft) or pattern for days 1-31

Repeat for the number of stations numres

Repeat for each year of the simulation
```

4.47 Downstream Call File (*.cal)

The downstream call file is used in conjunction with a downstream call operating rule type 23. See Section 4.13.23 for a description of this operating rule. This file is typically only used for a daily application. Therefore, when StateMod is executed in a monthly mode the call specified on day 1 is used to represent the monthly call. Note that this file is currently formatted to match an example file provided by the user that requested its implementation. Therefore some data contained in that file (e.g. calling structure, priority date) is not used by StateMod. An example is provided in Appendix B. For a monthly analysis this file is read by subroutine MDAINP. For a daily analysis this file is read by subroutine DAYEST.

```
Row-data       Variable          Description

Control Data
1                                Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1            ibm               Beginning month of data (e.g. 1=Jan)
1-2            iby               Beginning year of data (e.g. 1975)
1-3            iem               Ending month of data
1-4            iey               Ending year of data
1-5            cunit             Units of data ('NA')
1-6            cyr               Year type
                                    'CYR'= calendar year (1-12)
                                    'WYR'= water year (10-9)
                                    'IYR'= irrigation year (11-12)

Call Data
1                                Free Format
2-1            icy1              Year
2-2           icm1               Month
2-3           icd1               Day
2-4           dcall1             Administration number of calling right

Repeat for the number of days in simulation
```

4.48 Rio Grande Spill (*.rgs)

The Rio Grande Spill file contains a file that indicates when Elephant Butte Reservoir historically spilled. Note this file is used only when the Rio Grande Compact is simulated (operating rules 17 and 18) to determine when any debt accrued by Colorado is erased. An example is provided in Appendix A. This file is read by subroutine MDAINP.

```
Row-data       Variable          Description
```

```
Control Data
1                                  Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1            ibm                 Beginning month of data (e.g. 1=Jan)
1-2            iby                 Beginning year of data (e.g. 1975)
1-3            iem                 Ending month of data
1-4            iey                 Ending year of data
1-5            cunit               Units of data ('NA')
1-6            cyr                 Year type
                                      'CYR'= calendar year (1-12)
                                      'WYR'= water year (10-9)
                                      'IYR'= irrigation year (11-12)

For Rio Grande Compact Operating Rules only.
2-1            rspilx(1-12)        0= No Elephant Butte Spill
                                   +n= Elephant Butte Spill Data
                                      The integer portion is the month
                                         of spill (e.g. month 6 = 6)
                                      The decimal portion is the
                                         % of Spill that was Colorado's
                                      Note when a spill occurs:
                                         If Colorado is in debt it is erased
                                         If Colorado is in surplus
                                         their surplus is reduced by %

Repeat for the number of years in the simulation
```

4.49 Plan Data File (*.pln)

The plan station file contains information related to operating a term and condition, well augmentation and reuse plan. It provides data related to the plan including its ID, name, location on the river system, etc. If return flow data is specified for a plan it is provided in the Plan Return File (*.prf). Section 7.23 provides additional discussion of a plan and their use. An example is provided in Appendix A. This file is read by subroutine GETPLN. The following are noted:

Note this file uses a free format read (which is slowly being added to other parts of StateMod). Therefore Plan ID's and Plan names should be provided with no spaces or in double quotes (e.g. instead of My Name enter "My Name" or My_Name).

```
Row-data       Variable            Description

Station Data
1                                  Free Format
1-1            Pid(1)              Plan ID (include _ instead of blanks)
1-2            Pname(1)            Plan name (include _ instead of blanks)
1-3            iPsta(1)            River node where the plan is located
1-4            Pon(1)              On (1) or Off (0) switch
1-5            iPlnTyp(1)          Plan type
                                      1 = Terms and Conditions (T&C)
                                      2 = Well Augmentation
                                      3 = Reuse to a Reservoir
                                      4 = Reuse to a Diversion
                                      5 = Reuse to a Reservoir from Tmtn
                                      6 = Reuse to a Diversion from Tmtn
                                      7 = Trans mountain import
                                      8 = Recharge (reservoir or canal seepage
                                      9 = Out-of-Priority Diversion or Storage
                                      10 = Special Well Augmentation (e.g.
```

		Designated Basin, Coffin Wells, etc.) 11 = Accounting Plan 12 = Release Limit Plan
1-6	Peff(1)	Plan efficiency Enter 0 if not used Enter 1 to read 12 plan efficiency values (%) Enter 999 to use the source structure’s efficiency data
1-7	iPrf(1)	Plan Return Type Enter 0 if no plan return flows will be calculated Enter 1 for a T&C Plan with return data in the plan return flow file (*.prf) Enter 8 for a Recharge Plan with return data in the plan return flow file (*.prf) Enter 999 to use the source structure’s return flow data
1-8	iPfail(1)	Plan Failure Switch Used only for a T&C Plan (iPlnTyp = 1) Enter 0 to not turn plan off if it fails Enter 1 to turn a plan off if it fails
1-9	Psto1(1)	Initial plan storage value (acft) Used only for a T&C Plan (iPlnTyp = 3, 5, 9 & 12)
1-10	Psource(1)	If the plan type is 8 (recharge) enter ‘Reservoir’ if the source is reservoir Seepage and enter ‘Diversion’ if the Source is canal loss. If the plan type is not 8 (not recharge) enter NA or any other comment
1-11	iPAcc(1)	Source Account of the structure where plan water becomes available (Note this information is currently used only when the plan type is recharge (type 8) from a reservoir

Plan Efficiency Data
Include only if the plan efficiency variable (Peff) = 1
Free Format

2-1	Peff(1,j), j=1,12	Plan efficiency for month 1-12 Note the first entry corresponds to the first month specified in the control file

4.50 Well Augmentation Plan Data File (*.plw)

The well augmentation plan file contains information that allows a well to operate out of priority because it is tied to an augmentation plan. It provides data that ties a plan ID to a well water right ID and the structure served by that well. This file is read by subroutine GetPlnW. The following is noted:

- StateMod allows one well to be tied to more than one structure. When this occurs the well’s water right should be distributed to each structure. Typically the distribution to each structure is based on the acres served by each. This distribution limits total pumping by a well to the decreed rate.

- Because a well may be tied to more than one structure the Well Augmentation Plan file (.plw) is tied to both a well right and the structure served by that right. This limits that augmentation requirement for that well to the structure it serves.

Note this file uses a free format read (which is slowly being added to other parts of StateMod). Therefore Plan ID's and Plan names should be provided with no spaces or in double quotes (e.g. instead of My Name enter "My Name" or My_Name).

Row-data	**Variable**	**Description**
Free Format		
1-1	cistatP	Plan ID
1-2	cistatW	Well Right ID
1-3	cistatS	Well Structure associated with this Well Right

4.51 Plan Return Flow File (*.prf)

The Plan return file contains return flow data that is used to route canal seepage back to the stream over time. If no plan return flow data is provided any plan seepage is considered a loss. Similarly if the percent return does not equal 100% then the balance (100%-value specified) is considered a loss. An example is provided in Appendix A. This file is read by subroutine GETRES.

Row-data	**Variable**	**Description**
Control Data		
1		Free Format
1-1	cistat	Plan ID
1-2	crtnid	River node receiving return flow
1-3	pcttotPP(1)	Percent of return flow to this river node
1-4	irtndlPP(1)	Delay (return flow) table for this return flow

Repeat for number of return flow locations

Repeat for number of plans with return flow data

4.52 Reservoir Return Flow File (*.rrf)

The Reservoir return file contains return flow data that is used to route reservoir seepage back to the stream over time. If no reservoir return flow data is provided any reservoir seepage is considered a loss. Similarly if the percent return does not equal 100% then the balance (100%-value specified) is considered a loss. An example is provided in Appendix A. This file is read by subroutine GETRES.

Row-data	**Variable**	**Description**
Control Data		
1		Free Format
1-1	cistat	Reservoir ID
1-2	crtnid	River node receiving return flow
1-3	pcttotRP(1)	Percent of return flow to this river node
1-4	irtndlRP(1)	Delay (return flow) table for this return flow

Repeat for number of return flow locations

```
Repeat for number of reservoirs with return flow data
```

4.53 Reach Data File (*.rch)

The Reach Data file is used to summarize diversion comparison, well comparison, and Consumptive Use reports by reach when the Report option (-report) is specified. To eliminate the need to build a Reach Data file, a preliminary one (*.xrh) is generated by the check option (-check) for every diversion and well in the system. This preliminary Reach Data file contains two main components: Reach Data and Node Data.. An example is provided in Appendix A. The following are noted:

- Reach data is used to define how one stream reach is connected to another.
- Node data is used to assigned a stream (river) node to a stream reach.
- The default name for the preliminary file created by the check option is *.xrh. This preliminary file is commonly revised in an editor to reassign the Reach Data connectivity. In addition sub reaches may be defined to represent structures not bounded by a stream gage. After editing the Reach Data file is typically renamed to *.rch to avoid it being overwritten every time a new check run is made.
- If a river gage (*.rig) file is provided it is used by the Check option to define stream reaches. If one is not provided the Check optin uses data in the historic stream file (*.rih) to identify stream reaches. As described, this preliminary definition of steram reaches may be redefined by the user in an editor.
- The file format is free. Therefore names like My Name should be entered as a single string with a hyphen (e.g. My_Name) or enclosed in double quotes (e.g. “My Name”).

Row-data	**Variable**	**Description**
1	ctype	Free Format
1-1	ctype	Reach_Data
2-1	RchIdR	Reach ID
2-2	RchNameR	Reach Name
2-3	RchTo	Reach ID reach goes to
2-4	Rrec24	Reach Name reach goes to
2-5	StaID	Stream ID reach goes to

```
Repeat row 2 for number of Stream Reaches.
```

Row-data	**Variable**	**Description**
1	ctype	Free Format
1-1	ctype	Node_Data
2-1	StaID	River Station ID
2-2	RchNameX	Reach Name
2-3	iRchX	Associated Reach #
2-4	RchIDX	Reach ID

```
Repeat row 2 for the number of Stream Nodes.
```

4.54 Plan to Reservoir Recharge Data File (*.plr)

The plan to reservoir recharge file contains information that links a recharge site to an augmentation plan. It provides data that ties a plan ID to a reservoir right, reservoir structure and reservoir owner. This file is read by subroutine GetPlnR. The following is noted:

- StateMod allows one augmentation plan to be tied to more than one recharge sites.

Note this file uses a free format read (which is slowly being added to other parts of StateMod). Therefore Plan ID's and Plan names should be provided with no spaces or in double quotes (e.g. instead of My Name enter "My Name" or My_Name).

Row-data	**Variable**	**Description**
Free Format		
1-1	cistatP	Plan ID
1-2	cistatR	Reservoir Right ID
1-3	cistatS	Reservoir Structure associated with this Right
1-4	cistatO	Reservoir Owner associated with this plan

5.0 Output Description

This chapter describes the report options available in StateMod. The following sections are available in this chapter:

- 5.0 Remarks
- 5.1 Base Flow Module
- 5.2 Simulate Module
- 5.3 Report Module
- 5.4 Data Check Module

5.0 Remarks

There are numerous output files available from the three modules available in the State Model as described below. Typically an application will use only one or two output files and access the others for checking, plotting, etc. For scenario management, the files are given the simulation name plus a standard three character suffix as described below. Section 6.0 Model Operation describes the output command and how to obtain each output file. (Note, the output command NA indicates the file is generated by a module automatically. Also, unless otherwise noted, all output files are monthly). Appendix A provides example output files.

#	**Module**	**Output Command**	**Output File**	**Contents**
1	Base Flow	NA	*.xbi	Base Flow Information at Stream Gage locations
2	Base Flow	NA	*.xbg	Gaged Base Flow Estimates
3	Base Flow		*.xbm	Estimated Gaged and Ungaged Base Flow
4	Base Flow		*.log	Log file
1	Simulate	NA	*.xdd	Direct and Instream Diversion Data Summary
2	Simulate		*.xre	Reservoir Data Summary (total and by account)
3	Simulate		*.xop	Operation Right Summary
4	Simulate		*.xir	Instream Reach Summary
5	Simulate		*.xca	Call Data Summary
6	Simulate	(1)	*.xpl	Plan Data Summary
7	Simulate	(2)	*.xrp	Replacement Reservoir Summary
8	Simulate	(3)	*.xwe	Well Summary
9	Simulate		*.xss	Structure Summary
10	Simulate		*.log	Log file

11	Simulate-Daily	N/A	*.xdy	Direct and Instream Diversion Data Summary
12	Simulate-Daily		*.xry	Reservoir Data Summary (total and by account)
13	Simulate-Daily		*.xwy	Well Summary (if wells are used)
1	Report	-xst	*.xdd	Direct and Instream Diversion Data Summary
2	Report		*.xre	Reservoir Data Summary (total and by account)
3	Report		*.xop	Operation Right Summary
4	Report		*.xir	Instream Reach Summary
5	Report		*.xwe	Well Summary
6	Report	-xnm	*.xnm	Detailed Node Accounting For All Structures By Year
7	Report		*.xna	Detailed Node Accounting Average
8	Report	-xpl	*.xpl	Detailed Plan Accounting Average
9	Report	-xwb	*.xwb	Water Balance
			*.xgw	Ground Water Balance
10	Report	-xwr	*.xwr	Water Right List Sorted by Basin rank
11	Report	-xdg	*.xdg	Direct Diversion, Instream & Gage Graph file
12	Report	-xrg	*.xrg	Reservoir Graph file
13	Report	-xwg	*.xwg	Well Graph file
14	Report	-xdc	*.xdc	Diversion Comparison file
15	Report	-xrc	*.xrc	Reservoir Comparison file
16	Report	-xwc	*.xwc	Well Comparison file
17	Report	-xsc	*.xsc	Stream Flow Gage Comparison file
18	Report	-xcu	*.xcu	CU Summary
			*.xsu	Water Supply Summary
			*.xsh	Shortage Summary
			*.xwd	CU by Water District (first 2 digits of each ID)
19	Report	-xrx	*.xrx	River Data Summary
20	Report	-xsp	*.xsp	Selected Parameter printout
21	Report	-xbn	*.xbn	ASCII Listing of Binary Direct and Instream Flow Diversion File
22	Report	-xbr	*.xbr	Binary file Listing of Reservoirs
23	Report	-xdy	*.xdy	Daily Direct and Instream Diversion Data
24	Report	-xry	*.xry	Daily Reservoir Data (total and by account)
25	Report	-xwy	*.xwy	Daily Well Data
26	Report	-xwp	*.xwp	Well to Plan Summary
25	Report	N/A	*.log	Log file
1	Data Check	N/A	*.xcb	Base Flow by River ID
2	Data Check	N/A	*.xcd	Direct Demand by River ID
3	Data Check	N/A	*.xci	Instream Demand by River ID
4	Data Check	N/A	*.xcw	Well Demand by River ID
5	Data Check	N/A	*.xwr	Same as *.xwr from the Report option
6	Data Check	N/A	*.xtb	Tabular summary of Input Formatted for Use in a Standard Report
7	Data Check	N/A	*.xou	List of ID's Formatted for Making ID

```
                                                Specific Data Requests
      8 Data Check     N/A     *.log    Log file
```

```
(1) Plan output is included only when plan data is provided.
(2) Replacement reservoir data is included only when a replacement reservoir
    operating rule is provided.
(3) Well output is included only when well data is provided and the control
    switch (iwell) is non zero.
```

5.1 Base Flow Module Output Files

There are four standard output files from the Base Flow Module; the Base Flow Information File (*.xbi), the Gaged Base Flow Estimate File (*.xbg), the Gaged and Ungaged Base Flow Estimate File (*.xbm), and the Log File (*.log).

5.1.1 Base Flow Information File

The **Base Flow Information** file (*.xbi) contains information associated with the base flow estimates but in a spreadsheet format for checking. It contains the following data:

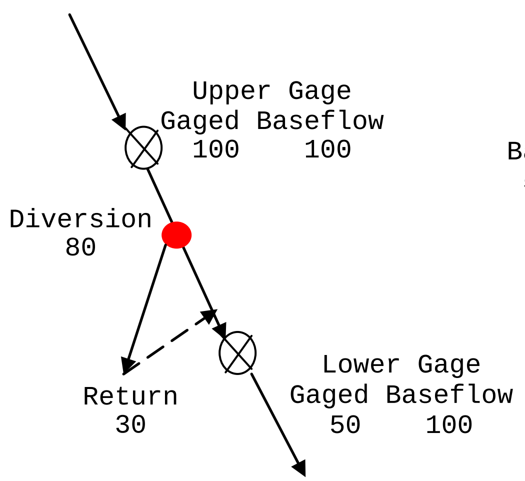
#	Column	Description
0	Year	Simulation Year
0	Mon	The first month specified in the control file
0	Days	The number of days in the month
0	River ID	River station ID
1	Gaged Flow	The streamflow provided in the stream flow file (Section 4.14)
2	Import (-)	The total imports (indicated as negative diversion)
3	Divert (+)	The total of diversions upstream of the river ID Provided in the diversion files (Section 4.15, 4.16, and 4.17)which result in a positive adjustment to the gauged flow
4	Return (-)	The total of current and lagged return flows from upstream diversions and well pumping
5	Well Dep (+)	The total of current and lagged stream depletions from wells (not adjusted for returns)
6	Delta Sto (+)	The total of upstream reservoir storage changes from data in the End of Month content file (Section 4.21) which result in a positive adjustment to the gaged flow
7	Net Evp (+)	The total of upstream net evaporation occurring at upstream reservoirs which result in a positive adjustment to the gaged flow
8	Total Base Flow	The estimated base flow
	w/o(-) Base Flow	The estimated base flow with negative values set to zero

5.1.2 Gaged Base Flow Estimate File

The **Gaged Base Flow Estimate** file (*.xbg) contains base flow estimates at each gage location provided in the Stream Station input file (Section 4.4). Note, this file is typically used to allow man's impact to be removed from gaged data prior to filling gaps using a technique such as regression. It contains the following data:

Column	**Description**
Year	Simulation year
ID	River station ID
Oct	Base flow in Oct (the first month specified in the control file (Section 4.2))
Nov - Dec	Same as above for each month of the year
Total	Total annual flow for the year
Repeat	For each River ID and year

For example,



Baseflow Lower =
50 + 80 – 30 =
100

5.1.3 Other Base Flow Files

The **Base Flow Estimate for Model Input** file (*.xbm) contains gaged and ungaged data in the same format as the gaged base flow estimate file (*.xbg). This file is commonly used as an input file to the Simulate Module.

The **Log File** (*.log) contains a log of the base flow module's operation. Its output file is named *.log.

5.2 Simulate Module Output Files

There are seven (7) standard output files from the Simulate Module. In addition if a plan is modeled then a plan output file is provided. Similarly if a replacement reservoir (type 10) operating rule is specified, then a replacement reservoir file is produced. Following is a description of the data provided in each

5.2.1 Stream Summary File

The **Stream Summary File (*.xdd)** describes all stream flow data at all river nodes. For nodes with stream gages, only the columns containing hydrology data described below (Upstream Inflow, Reach Gain, Return Flow, River Inflow, River Outflow) have non zero values. Nodes with reservoirs are similar to stream gage nodes but include the column River Divert, which may be positive if the reservoir diverts or negative if the reservoir releases. Instream reach data is printed for the upstream node and represents the minimum diverted within the reach. For detailed instream flow reach analysis, the file *.xir, provides detailed data for each node within the instream flow reach.

The header of the Stream Summary File (*.xdd) describes the structure ID, account and name. In addition, it describes the administration number, on/off switch, owner, and decreed amount for each water right located at this river node. It then contains a time series for the following:

```
  #     Column            Description
General
  0     Str ID            Structure ID
  0     Riv ID            River node ID
  0     Year              Year of the simulation
  0     Mo                Month of the simulation

Demand
  1     Total Demand      Structure Demand provided in the demand files
                          Note if demand data is provided as a consumptive
                            Value total demand is adjusted using a surface
                            Water efficiency
  2     CU Demand         Consumptive Demand. Note if a consumptive demand
                            File (*.ddc) is provided this value is printed.
                            If a consumptive demand file is not provided this
                            value is calculated from demand and efficiency
                            data
From River by
  3     Priority          Water Supply from the river by a priority diversion
                            (standard and Operation type 11 diverting
                            structure)
  4     Storage           Water Supply from the river by a storage release
  5     Other             Water Supply from the river via an exchange, water
                            right transfer or plan
  6     Loss              Water Supply lost to the system at the river
From Well
  7     From Well         Water Supply from wells to the structure at this
                             river node.
```

From Carrier by

8	Priority	Water Supply from a carrier by a priority diversion (Operation type 3 or 11 destination structure)
9	Other	Water Supply from a carrier by a storage release or exchange (Operation type 2 or 6 destination structure if not diverting)
10	Loss	Water Supply from a carrier lost in transit

Other

11	Carried Exchange Bypass	Water Supply diverted for carrier purposes. The source will be presented as a From River by Priority, From Carrier by Priority, or From River by Other.
12	From Soil	Water supplied from the soil zone
13	Total Supply	The sum of all water supplies (does not include Carried Water)

Shortage

14	Total Short	The difference between Total demand and total supply
15	CU Short	The difference between the CU demand and CU

Water Use

16	CU	Consumptive use of the water supply
17	To Soil	Water diverted to the soil zone.
18	To Other	For a diversion this column describes the total return flow (e.g. the amount that will return over all return time periods) For a reservoir this column describes the water diverted to storage. For an administrative or CU reuse plan this column describes water diverted to the plan
19	Loss	Water diverted that is not consumed, to soil or returned. Typically is non zero when the sum of return locations or delays do not equal 100%.

Station In/Out

20	Upstream Inflow	Inflow from an upstream node to this reach
21	Reach Gain	Inflow from gains to this node as described in stream inflow file (Section 4.14)
22	Return Flow	Inflow from returns to this node. Note this term includes returns from both surface and well supplies in the current time step.
23	Well Depletion	Depletion caused by pumping in prior time steps. Note this term impacts the river inflow (water supply)this month.
24	To_From GWStor	Inflow or outflow to ground water storage. Note this term is positive when ground water storage is required to offset pumping depletions in the current month that cause the river to go negative. This term is negative when stream flow is required to offset water originating from ground water storage in prior months.

Station Balance

25	River Inflow	The sum of inflows to this node
26	River Divert	The sum of water supplies diverted at this node (does not include From Carrier by Storage or From Carrier by Priority)
27	River by Well	The depletion caused by a well in this month. Note this term is similar to a diversion in the current month.
28	River Outflow	Outflow from this node

#	Column	Description
29	Avail Flow	Available flow at this river node. This is the amount of water available to a potential user that is the most junior in the basin.
30	Control Location	Location on the river that limits the diversion
31	Control Right	Water Right that limits the diversion (calling Right)

5.2.2 Reservoir Summary File

The **Reservoir Summary File (*.xre)** describes diversion, release, storage and stream flow data at river nodes that contain a reservoir. The header describes the reservoir ID, account and name. In addition, it describes the administration number, on/off switch, owner, and decreed amount for each water right located at this river node. It then contains a time series for the following:

#	**Column**	**Description**
General		
0	River ID	River node ID
0	Account	Reservoir account (0 is the total)
0	Year	Year of the simulation
0	Mo	Month of the simulation
1	Initial Storage	Storage at the beginning of month
Water Supply From River by		
2	Priority	Water Supply from the river by a priority diversion standard and Operation type 11 diverting structure)
3	Storage	Water Supply from the river by a storage release
4	Other	Water Supply from the river by an exchange, water Right transfer or plan.
Water Supply From Carrier by		
5	Priority	Water Supply from a carrier by a priority diversion
6	Other	Water Supply from a carrier via a storage release or
7	Total Supply	The sum of all water supplies
Water Use from Storage to		
8	River for Use	Releases for downstream use (Operation type 1 and 2)
9	River for Exc.	Releases for exchange (Operation type 4)
10	Carrier for Use	Releases to a carrier canal (Operation type 3)
11	Total Release	Total of all releases
Other		
12	Evap	Net evaporation
13	Seep and Spill	Seepage and spills
14	EOM Content	End of Month Content
15	Target-0 Stor-n Limit	For the total reservoir (account 0) Target Storage for accounts (account n) their storage limit
16	BOM Decree Limit	The remaining limit to the one fill rule at the beginning of the month
Station Balance		
17	River Inflow	The sum of inflows to this node

```
 18      Total Release    Total release
 19      Total Supply     Total reservoir supplies
 20      River by Well    The depletion caused by a well in this month.
                            Note this term is similar to a diversion
                            in the current month.
 21      River Outflow    Outflow from this node
```

5.2.3 Well Summary File

The **Well Summary File (*.xwe)** describes the structure data (demand, surface supply, ground supply and shortage), use of water (CU, return and loss) and source of water (river, ground water storage and salvage) for every structure that has a well. The header describes the well ID, account and name. In addition, it describes the administration number, on/off switch, owner, and decreed amount for each ground water right located at this structure. It then contains a time series for the following:

```
 #       Column           Description
General

 0       Structure ID     Well Structure ID
 0       River ID         River node ID
 0       Year             Year of the simulation
 0       Mo               Month of the simulation

Demand
 1       Total Demand     Structure Demand provided in the demand files
                          Note if demand data is provided as a consumptive
                            Value total demand is adjusted using a surface
                            Water efficiency
 2       CU Demand        Consumptive Demand. Note if a consumptive demand
                            File (*.ddc) is provided this value is printed.
                            If a consumptive demand file is not provided this
                            Value is calculated from demand and efficiency
                            data

Water Supply
 3       From Well        Water Supply from wells to this structure
                           (e.g. pumping)
 4       From SW          Water Supply from other sources (diversions,
                            reservoirs or other Well structures) that are
                            tied to this well structure.
                            Note if this well structure is not tied to a
                            diversion, this column will be zero.
 5       From Soil        Water supplied from the soil zone.
 6       Total Supply     The sum of all water supplies (does not include
                            carried water

Short
 7       Total Short      The difference between Total demand and total
                            supply.
 8       CU Short         The difference between the CU demand and CU

Water Use
 9       CU               Consumptive use of the water supply
10       To Soil          Water diverted to the soil zone.
11       Total Return     Total return flow (note the amount that will return
                            over all return time periods)
12       Loss             Water diverted that is not consumed, to soil or
                            Returned. Typically is non zero when the sum
```

```
                           Of return locations or delays do not equal 100%.
13      Total Use        Total water use (CU + To Soil + To Return + Loss)

Water Source

14      From River       Well water supplied by the River in this month.
15      From GWStor      Well water supplied by Ground Water in this month
                           (e.g. lagged depletions).
16      From Salvage     Well water supplied by ET Salvage.
17      From Soil        Well water supplied by the soil zone.
18      Total Source     Total water source (From River + From GWStor
                           + From Salvage + From Soil) node
```

5.2.4 Structure Summary File

The **Structure Summary File (*.xss)** is a standard output when the variable efficiency option is used (control variable *ieffmax*=1). The report describes structure data related to area, demand, surface water, ground water, soil storage, consumptive use and returns. It was developed to provide data similar to that provided by StateCU, the State's consumptive use model. Something is missing between this sentence and the next one??

water use when the variable efficiency option is used (ieffmax=1)(demand, surface supply, ground supply and shortage), use of water (CU, return and loss) and source of water (river, ground water storage and salvage) for every structure that has a well. The header describes the structure (diversion or well ID), account and name. In addition, it describes the administration number, on/off switch, owner, and decreed amount for each water right located at this structure. It then contains a time series for the following:

```
 #      Column           Description
General
 0      Structure ID     Structure ID (diversion or well)
 0      Year             Year of the simulation
 0      Mo               Month of the simulation

Area
 1   Sprink              Acres served by a sprinkler
 2   GW                  Acres served by ground water
 3   Total               Total Acres

Demand
 4   Total Demand       Structure Demand provided in the demand files
                          Note if demand data is provided as a consumptive
                          value total demand is adjusted using a surface
                          water efficiency
 5   CU Demand          Consumptive Demand. Note if a consumptive demand
                          file (*.ddc) is provided this value is printed.
                          If a consumptive demand file is not provided this
                          value is calculated from demand and efficiency data

Surface Water
 6   Divert             Water diverted
 7   ConEff             Percent Conveyance Efficiency
 8   MaxEff             Maximum farm efficiency
 9   To CU              Water consumed
10   To Soil            Water diverted to soil
```

```
11   Return              Water that will return
12   Loss                Water that is lost to system
13   ActEff              Percent Actual efficiency (To CU + To Soil)/Divert)
                           * 100

Ground Water
14   Pump                Water pumped
15   Capacity            Well capacity
16   FldEff              Percent Field efficiency for non sprinklers
17   SprEff              Percent sprinkler efficiency
18   To Soil             Water diverted to soil
19   Return              Water that will return
20   Loss                Water that is lost to system
21   ActEff              Percent Actual efficiency (Pump + To Soil)/Divert
                           * 100

Soil Moisture
22   Soil Storage        Volume of water in soil moisture storage

Consumptive Use
23   SW&GW               Consumptive use of surface and ground water
24   Soil                Consumptive use of soil moisture
25   Total               Total CU (sum of SW&GW and Soil)

Return
26   Total Return        Total of all return flows
```

5.2.5 Operation Summary File

The **Operation Summary File (*.xop)** provides a matrix of diversion or release activities associated with each operating right.

5.2.6 Log File

The **Log File (*.log)** contains a log of the simulate module's operation. Its output file is named *.log.

5.2.7 Check File

The **Check File (*.chk)** contains a description of key data and detailed warnings (if any). The check file should always be reviewed following a simulation.

5.2.8 Replacement Reservoir File

The **Replacement Reservoir File (*.xrp)** is a standard output when a Replacement Reservoir (type 10) operating rule is specified. It was developed to provide detailed replacement reservoir operation information. It is particularly useful when more than one replacement reservoir is operational. Note that a release may not equal a diversion if the release is limited to the structures consumptive use. This

“Depletion” Vs “Diversion” option is implemented by structure using variable *ireptyp* in the diversion station (*.dds) file.

#	Column	Description
General		
0	Structure ID	Structure ID (diversion or well)
1	Year	Year of the simulation
2	Mo	Month of the simulation
3	Iter	Iteration
4	Call	Counter to Replace Subroutine per time step
5	Opr ID	Operational Right ID
6	Type	Type of Release (Direct or Exchange)
7	Source ID	Replacement Reservoir
8	Source Name	Replacement Reservoir Name
9	Destin. ID	Destination Diversion ID
10	Destin. Name	Destination Diversion Name
11	Release	Reservoir release
12	Tot-Rel	Total Reservoir Release
13	Divert	Water diverted
14	Tot-Div	Total diversion
15	DepAdj	Depletion Adjustment
16	Rel%	Release %
17	Divo	Total diverted by this operating right this time step
18	ishort	Shortage indicator 0=none, 1=yes

5.2.9 Plan Summary File

The **Plan Summary File (*.xpl)** is a standard output when a Plan structure type is used. The report describes structure data related to a plan including its type, ID and Source. In addition it describes any operating rules that may use the plan (Use) or provide water to the plan (Src) and whether or not the operating rule tied to that plan is turned on. Note if a plan source is not turned on, an operating rule that uses that plan as a source has its status reported as “off” and a warning is provided in the log file. The data printed to a plan depends on the type of plan specified.

Plan Description	Plan Type	Plan Report
1. Terms & Condition Plan	1	5.2.9.1
2. Well Augmentation	2	5.2.9.2
3. Reservoir Reuse Plan	3	5.2.9.3
4. Non Reservoir Reuse	4	5.2.9.4
5. TransMtn Reservoir Reuse	5	5.2.9.3
6. TransMtn Non Reservoir Reuse	6	5.2.9.4
7. Transmountain Import	7	5.2.9.4
8. Recharge Plan	8	5.2.9.4
9. Out-of-Priority Plan	9	5.2.9.5
10. Special Well Augmentation Plan	10	5.2.9.6
11. Accounting Plan	11	5.2.9.7
12. Release Limit Plan	12	5.2.9.8

5.2.9.1 Term and Condition Plan (type 1)

#	Column	Description
General		
0	Plan ID	Plan ID
0	River ID	Plan location on the River network
0	Year	Year of the simulation
0	Mo	Month of the simulation
1	Initial Demand	T&C Plan demand at beginning of time step
2	Demand Total	T&C Plan demand at this time step
3	Src 1	Water source 1
..	..	..
..	..	..
13	Total	Total of all sources
14	Ending Demand	T&C Plan demand at end of time step

5.2.9.2 Well Augmentation Plan (type 2)

#	Column	Description
General		
0	Plan ID	Plan ID
0	River ID	Plan location on the River network
0	Year	Year of the simulation
0	Mo	Month of the simulation
1	From Well	Augmentation Well Pumping
2	Plan Demand	Augmentation Plan Demand at this time step Note Plan Demand is well depletion less return flow From this plans pumping
3	Src 1	Water source 1
..	..	..
..	..	..
8	Shortage	Plan shortage
9	Total	Total of all sources and shortages

5.2.9.3 Reservoir Reuse Plan (type 3 or 5)

#	Column	Description
General		
0	Plan ID	Plan ID
0	River ID	Plan location on the River network
0	Year	Year of the simulation
0	Mo	Month of the simulation
1	Initial Storage	Initial Reuse Plan storage
2	Supply Total	Reuse Plan Total Supply this time step
3	Use 1	Reuse 1
..	..	..
..	..	..
12	Use 10	Reuse 10
13	Total	Total of all uses
14	Ending Storage	Ending Reuse Plan storage

5.2.9.4 Non Reservoir Reuse Plan (type 4, 6, 7 or 8)

#	Column	Description

#	Column	Description
General		
0	Plan ID	Plan ID
0	River ID	Plan location on the River network
0	Year	Year of the simulation
0	Mo	Month of the simulation
1	Supply Total	Reuse Plan Total Supply this time step
2	Use 1	Reuse 1
..	..	..
..	..	..
11	Use 10	Reuse 10
13	Total	Total of all uses

5.2.9.5 Out-of-Priority Plan (type 9)

#	**Column**	**Description**
General		
0	Plan ID	Plan ID
0	River ID	Plan location on the River network
0	Year	Year of the simulation
0	Mo	Month of the simulation
1	Initial Demand	OOP Plan demand at beginning of time step
2	Demand Total	OOP Plan demand at this time step
3	Src 1	Water source 1
..	..	..
..	..	..
12	Src 10	Water source 10
13	Total	Total of all sources
14	Ending Demand	OOP Plan demand at end of time step

5.2.9.6 Special Well Augmentation Plan (type 10)

#	**Column**	**Description**
General		
0	Plan ID	Plan ID
0	River ID	Plan location on the River network
0	Year	Year of the simulation
0	Mo	Month of the simulation
1	Initial Demand	OOP Plan demand at beginning of time step
2	Demand Total	OOP Plan demand at this time step
3	Src 1	Water source 1
..	..	..
..	..	..
12	Src 10	Water source 10
13	Total	Total of all sources
14	Ending Demand	OOP Plan demand at end of time step

5.2.9.7 Accounting Plan (type 11)

#	**Column**	**Description**
General		
0	Plan ID	Plan ID
0	River ID	Plan location on the River network
0	Year	Year of the simulation
0	Mo	Month of the simulation

1	Supply Total	Simulated diversion accounted for in Plan
2	Use 1	Reuse 1
..	..	..
..	..	..
21	Use 20	Reuse 20
22	Total	Total of all uses

5.2.9.8 Release Limit Plan (type 12)

#	**Column**	**Description**
General		
0	Plan ID	Plan ID
0	River ID	Plan location on the River network
0	Year	Year of the simulation
0	Mo	Month of the simulation
1	Release Limit	Monthly release limit at beginning of time step
2	Use 1	Water source 1
..	..	..
..	..	..
21	Use 10	Water source 20
22	Total	Total of all sources

5.2.10 Other Simulation Files

The **Instream Reach Summary File (*.xir)** provides a matrix of total supply for each node associated with an instream flow reach.

The **Daily Direct Diversion File (*.xdy)** provides the same data as the monthly diversion and instream flow file (*.xdd) but on a daily time step.

The **Daily Reservoir Station file (*.xry)** provides the same data as the monthly reservoir station file (*.xre) but on a daily time step.

The **Daily Well Station file (*.xwy)** provides the same data as the monthly well station file (*.xwe) but on a daily time step.

The **Plan Summary file (*.xpl)** provides a summary of plan data and operational rules tied to a plan.

5.3 Report Module Output Files

There are twenty four (24) output files available from the Report Module as summarized in the table above and described below.

5.3.1 Basin Water Balance

The **Basin Water Balance Report (-xwb)** provides a description of the inflows, outflows and storage changes. Its output file is named *.xwb. It contains a time series for the following:

#	Column	Description
General		
0	Year	Year
0	Mo	Month
Inflows		
1	Stream Inflow	Total inflow to the river from model boundaries and natural gains
2	Return	Total return flow to the river
3	From/To GWStor	Total inflow or outflow from ground water storage
4	From SoilM	Total from soil moisture
5	From Plan	Total from a non-reservoir reuse plan (type 4) or An accounting plan (type 11) from one of the following 3 operating rules: 1 A Multiple Plan Ownership rule (type 46), 2 A Reuse Plan to a T&C or Augmentation Plan Direct rule (type 48), or 2 A Reuse Plan to a T&C or Augmentation Plan by Exchange rule (type 49)
6	Total Inflow	Total of inflows (Stream Inflow + Return + From/To GW Storage + From SoilM)
Outflows		
7	Divert	Total Diversion (From River by Priority + From River by Storage + From River by Exchange + From Carrier by Storage for operational type 3- Instream Diversions, Diversion to Storage From River by Carrier)
8	From River Well	Total well pumping from the River in this month
9	Well Depletion	Total well depletion from the river from pumping in previous months
10	Res. Evap	Total reservoir evaporation
11	Stream Outflow	Total outflow from the river
12	Reservoir Change	Total reservoir storage change (End of Month Content - Beginning of Month Content)
13	To SoilM	Total to soil moisture
14	SoilM Change	Soil moisture change (End of Month Content - Beginning of Month Content)
15	Total Outflow	Total of outflows (Divert + From River by Well + Well Depletion + Res. Evap + Stream Outflow + Reservoir Change + To SoilM + SoilM Change
Balance		
16	Delta	Difference between inflows and outflows
Other		
17	CU	Total Consumptive Use
18	Loss	Portion of diversions and pumping that are not consumed or do not return to the stream.

		Calculated to be (Diversion + Pumping) * (100 - sum of returns to river)
19	Pumping	Total well pumping
20	Salvage	Portion of well pumping offset by ET salvage. Calculated to be Well pumping * (100 - sum of depletions to river)

5.3.2 Water Right Report

The **Water Right Report (-xwr)** provides a sorted list of water rights. Its output file is named *.xwr. It contains the following:

#	Column	Description
1	Rank	Water right rank
2	Type	Water right type code (see footnote)
3	Admin #	Administration number
4	On/Off	On/Off switch (0=off, 1=on)
5	STR ID #1	Primary structure associated with this right
6	Str ID #2	Secondary structure associated with this right (used only when wells are tied to both a well and diversion structure)
7	Amount	Decreed amount (-1 for an operational right)
8	Right Name	Water right name
9	Structure Name	Associated structure name (blank for an operational right)

5.3.3 Other The **Standard Report (-xst)** produces four files; the Demand Summary File (*.xdd), the Reservoir Summary File (*.xre), the Instream Reach Summary File (*.xir), the Well Summary File (*.xwe) and the Operation Right Summary File (*.xop). These are the same files produced by the simulate option and are described above.

The **Node Accounting Report (-xna)** produces two files: the Detailed Node Accounting (*.xnm) file and Summary Node Accounting (*.xna) file. Both provide the same results as the standard report but are sorted by the stream order provided in the river network file (*.rin). The detailed node accounting file provided data for every month of the study period while the summary provides an annual average.

The **Diversion Graph Report (-xdg)** provides the same data presented in the diversion and stream gage summary report but it is formatted for easy graphing by a spreadsheet or other plotting package (e.g. XMGR for the workstation). Its output file is named *.xdg.

The **Reservoir Graph Report (-xrg)** provides the same data presented in the reservoir summary report but it is formatted for easy graphing by a spreadsheet or other plotting package (e.g. XMGR for the workstation). Its output file is named *.xrg.

The **Well Graph Report (-xwg)** provides the same data presented in the well summary report but it is formatted for easy graphing by a spreadsheet or other plotting package (e.g. XMGR for the workstation). Its output file is named *.xwg.

The **Diversion Comparison Report (-xdc)** compares the total diversion estimated by the model to the gaged record if available in the historic diversion file (*.ddh). Its output file is named *.xdc. If the user specifies –Report as a secondary parameter when executing this option (e.g. –report –xdc – Report) a **Diversion Comparison Summary Report (**.xdc) is generated for each Reach specified in the Reach Data (*.rch) file.

The **Reservoir Comparison Report (-xrc)** compares the end of month contents estimated by the model to the gaged record if available in the historic end of month content file (*.eom). Its output file is named *.xrc.

The **Well Comparison Report (-xwc)** compares the total well pumping estimated by the model to the gaged record if available in the historic well pumping file (*.weh). Its output file is named *.xwc. If the user specifies –Report as a secondary parameter when executing this option (e.g. –report –xwc –Report) a **Well Comparison Summary Report (**.xwc) is generated for each Reach specified in the Reach Data (*.rch) file.

The **Stream Comparison Report (-xsc)** compares the total diversion estimated by the model to the gaged record if available in the historic streamflow file (*.xsc). Its output file is named *.xsc. If the user specifies –Report as a secondary parameter when executing this option (e.g. –report –xsc –Report) a **Stream Comparison Summary Report** (*.xsc) is generated for each Reach specified in the Reach Data (*.rch) file.

The **Consumptive Use Water Supply Report (-xcu)** provides four output files; *.xcu, *.xsu, *.xsh and *.xwd. The CU summary (*.xcu) presents the total diversion by each structure in a special format required by the CRDSS consumptive use model. The supply summary (*.xsu) presents the total supply to each structure. The shortage summary (*.xsh) presents the shortage associated with each structure. The water district summary (*.xwd) presents the total diversion for each Reach specified in the Reach Data (*.rch) file.

The **River Data Summary Report (-xrx)** provides a summary of data provided by river node. Its output file is named *.xrx.

The **Selected Parameter Report (-xsp)** provides a printout of a selected parameter (e.g. Total_Diversion) available to the standard diversion (*.xdd), reservoir (*.xre) and well (*.xwe) output files. It reads the Output Request file (*.out) to determine the type of output (e.g. Diversion, InstreamFlow, StreamGage, Reservoir or Well), parameter (e.g. Total_Diversion) and ID to print. It creates two output files with the same data in a different format; the output formatted into a matrix is named *.xsp while the output formatted into a column is named *.xs2. Note to get a list of parameters for each data type, enter a dummy variable under parameter type (e.g. x) and review the log file.

The **Daily Selected Parameter Report (-xds)** provides a printout of a selected parameter (e.g. Total_Diversion) available to the standard daily diversion (*.xdy), reservoir (*.xry) and well (*.xwy) output files. It reads the Output Request file (*.out) to determine the type of output (e.g. diversion), parameter (e.g. Total_Diversion) and ID to print. It creates two output files with the same data in a different format; the output formatted into a matrix is named *.xds while the output formatted into a column is named *.xd2. Note to get a list of parameters for each data type (diversion, stream, instream flow, reservoir or well) enter a dummy variable under parameter type (e.g. x) and review the log file.

The **Well to Plan Summary (-xwp)** provides a summary of every well structure and the augmentation plans, if any, associated with a well structure.

The **Log File (*.log)** contains a log of the report module's operation. Its output file is named *.log.

The control file contains a variable named ichk that is used to obtain detailed results. Section 4.2 provides a description of these detailed report options.

5.4 Data Check Output Files

There are eight (8) standard output files from the Data Check Module; (1) the Base Flow File (*.xcb), (2) the Direct Demand File (*.xcd), (3) the Instream Demand File (*.xci), (4) the Well Demand File (*.xcw), (5) the Water Right List file (.xwr), (6) the Output Request File (*.xou), (7) the Reach File (*.xrh) and (8) the Log File (*.log). The first four files are self explanatory and describe the base flow, direct flow demand, instream flow demand and well demand at each river node, respectively. The water right list file is the same as that produced by the Report Module. The Output Request file provides a list of structure which may be used as an input file for data requests by structure. The Reach file provides a list of structure which may be used as an input file for data requests by reach. The log file contains a log of the data check module's operation.

6.0 Model Operation

The State Model is structured to perform one of four (4) interrelated activities:

Base Flows

Simulate

Report

Data Check

These activities may be executed by requesting the desired option from the screen or through command line arguments. For a description of each option, see Section 3.3 of this documentation. The model may be executed from the CRDSS Graphic User Interface, script or by entering the model's name as follows:

```
        statemod [file] [options]

where:
  file = base file name of the simulation

  Options (1) =
        -v or -version              Print the program version
        -u or -update               Print recent updates
        -base or -baseflow          Perform baseflow option
        -basex or -baseflowx        Perform baseflow option for ungaged areas only.
                           Note: This option assumes gaged flows are natural flows.
        -sim or -simulate           Perform simulate option
                                      with standard reports
        -simx or -simulatex         Perform simulate option
                                      without standard reports

        -rep or -report [options2] Perform report option
        -chk or -check              Perform data check option
```

(1) If omitted, the PC version of the model defaults to requesting the desired option from the screen, while the Unix version prints an error message.

Except for the -report option, each of the above requests are straight forward and require only one command line argument. The -report option allows for one or two additional parameters in order to request the desired report and, as appropriate, desired station without requiring data from the screen by the user. (Note, except for the standard output request (-std), the argument name is the same as the output file requested). Following are examples of the report option with second and third parameters supplies:

```
Argument (1)                  Result

-report -xnm                  Detailed node accounting for all years
                                and Detailed node accounting average
-report -xwb                  Water Balance
-report -xwr                  Water Right List sorted by basin rank
-report -xdg [-station id]    Direct Diversion, Instream Diversion and
                                Gage graph file
-report -xrg [-station id]    Reservoir graph file
-report -xwg [-station id]    Well graph file

-report -xdc                  Diversion comparison file
-report -xrc                  Reservoir comparison file
-report -xwc                  Well comparison file

-report -xsc                  Stream flow gage comparison file
-report -xcu                  Diversions by ditch formatted for the CU
                                model
-report -xst                  Standard diversion (*.xdd) and reservoir
                                (*.xre) output

-report -xsp                  Special parameter report (2).
```

(1) If omitted, the PC version of the model defaults to request the desired option from the screen, while the Unix version prints an error message.

(2) For the special parameter report the output type (e.g. diversion, reservoir, well, stream gage or All) and parameter (e.g. River Outflow) must be specified in the output request file.

7.0 Technical Notes

This chapter provides technical notes on selected portions of the State of Colorado's Stream Simulation Model (State Model). The following sections are available within this chapter:

7.1 Baseflows at Stream Gages

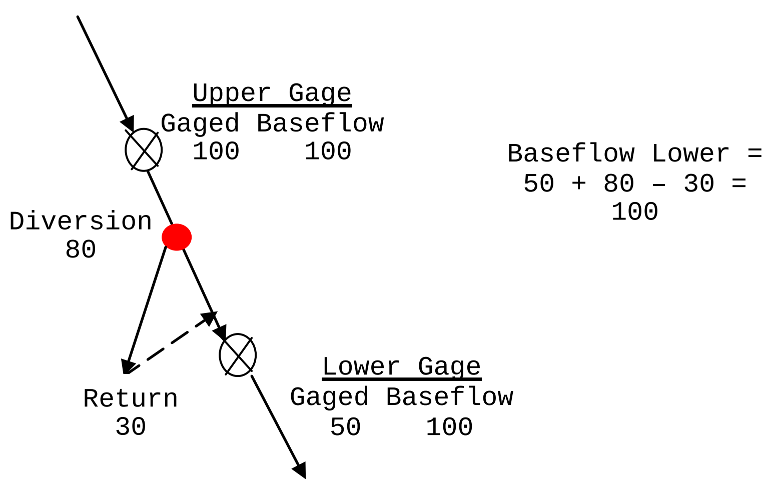
The State Model estimates baseflows at stream gages using the following formula:

Qb = Qg + D - R - S + E - I

Where:

Qb	= Base flow
Qg	= Gaged flow
D	= Upstream diversions
R	= Upstream return flows
S	= Upstream change in reservoir storage
E	= Upstream reservoir evaporation
I	= Imports

For example,



7.2 Baseflows at Ungaged Locations

Baseflows at ungaged tributaries are zero unless specified by the user. Therefore, in order to have a water supply in tributary headwaters, an ungaged baseflow must be estimated. Baseflow gains are estimated to occur at a baseflow nodes. Therefore to simulate the river's gain or loss between gaged points, an ungaged baseflow node must be estimated. The State Model estimates baseflows at ungaged locations from baseflow estimates at gaged locations using the following formula:

```
FlowX   = (FlowB(1)*coefB(1) + FlowB(2)*coefB(2)+ ....) +
            pf * (FlowG(1)*coefG(1) + FlowG(2)*coefG(2)+ ....)

Where;
FlowX   =      Flow at intermediate node to be estimated

FlowB   =      Base flow station(s)
FlowG   =      Gain flow station(s)

pf      =      Proration factor for gain term
coefB   =      Base flow coefficient
coefG   =      Gain flow coefficient
```

Note the first term (FlowB(1)*coefB(1)...) represents upstream gaged flow while the second term (pf * (FlowG(1)*coefG(1) ...) represents a distribution of the gain which occurs between gaged flow. The terms FlowB and FlowG are commonly gaged streamflow stations. The proration factor (pf) is used to distribute the gain between reaches and is commonly estimated to be a ratio of the drainage area and average annual precipitation at the ungaged location to that in the gaining reach. The coefficients coefB and coefG are provided throughout the formula for special cases, but are typically 1.0 or -1.0.

The general baseflow formula described above is typically implemented with discretion by a modeler to represent the "gain approach" or the "neighboring gage approach". In the "gain approach", each gage is assigned a coefficient that typically represents but is not required to be the "Area*Precipitation" (A*P) term, equal to the product of total area above the gage, and average annual precipitation over the gage's entire drainage area. Ungaged baseflow points are assigned an incremental "A*P", the product of the incremental drainage area above the ungaged baseflow point and below upstream gages, and the average annual precipitation over the incremental area. The above illustrates a hypothetical basin and the areas associated with each of three gages and an ungaged location.

The portion of the baseflow gain below Gages 1 and 2 and above Gage 3, at the Ungaged location between the gages, is the gage-to-gage baseflow gain (BF_3 minus ($BF_2 + BF_1$)) times the ratio $(A*P)_{ungaged}/[(A*P)_{downstream\ gage} - \Sigma\ (A*P)_{upstream\ gage(s)}]$. Total baseflow at the ungaged location is equal to this term, plus the sum of baseflows at upstream gages. In the example there is only one upstream gage, having baseflow BF_1.

A second option for estimating ungaged baseflows is the "neighboring gage approach". In the neighboring gage approach, a baseflow time series is created by multiplying the baseflow series at a specified gage by the ratio $(A*P)_{headwater}/(A*P)_{gage}$. This approach is effective, for example, for an ungaged tributary parallel to and close to a gaged tributary.

Following are general guidelines to selecting the ungaged baseflow approach:

- Use the “gaged approach” at an ungaged location that is dominated by upstream gaged flows or when the ungaged location has a relatively large drainage area when compared to gaged data’s drainage area.
- Use the “neighboring gage approach” when the ungaged location’s drainage area is relatively small when compared to gaged data’s drainage area. Note, when the neighboring gage approach is taken, the modeler is, in effect, adding a 'new' gage. Therefore, when this approach is implemented, care must be exercised to ensure the gain coefficients (coefG) and proration factor (pf) accurately account for this 'new' gage and its associated drainage area.

7.3 Instream Reach Considerations

The State Model allows instream flows to be modeled as a point or as a reach. The following are noted:

- When modeled as a point only the instream flow location is required as input data.
- When modeled as a reach both the upstream and downstream locations are required as input data.
- When modeled as a reach the data printed to the standard diversion output file (*.xdd) represents the minimum amount diverted by the instream flow within the reach. Therefore one may notice the water available in the river exceeds the amount diverted. The instream reach output file (*.xir) provides data on the minimum instream diversion as well as the diversion at every point within the instream flow reach.

7.4 Well Operation Considerations

The State Model allows ground water pumping via wells to be modeled. The following are noted:

- Wells are operated within StateMod as water rights tied to a well structure that may or may not be tied to a diversion structure. When a well is not tied to a diversion structure it does not need to be included in the network. For such a case, the well structure variable *cgoto* needs to represent the most upstream river node that is impacted by a well’s depletion and the variable that links to a ground water structure to a surface water structure, *idvcow2* should be set to N/A.
- If a well structure is not tied to a surface water structure (*idvcow2* = N/A) then well demands are provided in the well demand file (*.wem).
- If a well structure is tied to a surface water structure (*idvcow2* = surface structure ID), then demands may be provided and treated in several ways as specified by the control variable *icondem* (see Section 7.10)
- Wells may increase the water supply available at the river at a given time step if well return flows exceed the stream depletion. StateMod checks for such a condition and reoperates to allow senior ditches to benefit from the additional water supply.
- Wells may require two or more delay patterns to represent the delay associated with return flows and depletions. The data for both types of delays are specified in the unit response file (*.urm). Note when the sum of return flows to the river is less than 100%, the balance is treated as a loss. Similarly when the sum of depletions to the river is less than 100%, the balance is treated as salvage (i.e. water is supplied from sources other than the river such as native evapotranspiration, incidental losses, etc.)

- Wells may cause river flows to go negative when the well's estimated depletion to the river exceeds the streamflow. StateMod treats such an occurrence as an indication that pumping impacts have depleted ground water storage rather than the stream flow. Under such a case, StateMod allows the pumping to occur and accounts for the source of water as originating from ground water storage. This water is presented in the column "From/To GW Stor" for each river node in the diversion summary output (*.xdd) and for the whole basin in the water budget report (*.xwb). Note the quantity of water supplied by ground water storage in a simulation time period is taken out of the stream the next time period before any water allocation occurs. The control file (*.ctl) variable iwell = 2 or 3 allows the repayment of this water to be limited to a maximum amount to represent a stream ground water system that are disconnected. Also, since data for this term is generally not observed, baseflow calculations may be influenced by this lack of data.
- Well information is presented in four columns of the diversion summary report (*.xdd). The column titled "From Well" describes the total amount of water pumped and made available to a diversion. The column titled "Well Depletion" represents the impact of a previous months pumping on the river. The column titled "To/From GW Stor" was described above. The column titled "River by Well" represents the impact of the current months pumping on the river. The "Well Depletion" and "River by Well" data are separated because the impact of a previous months pumping on the river influences the water supply available to all users before any diversions occur while the impact of the current months pumping impacts water rights that are junior to the well only. Note by definition, a well structure that is not tied to a diversion has no data under the column "From Well". However, the columns titled "Well Depletion" and "River by Well" include the impact of all well pumping on the river.

7.5 Available Flow

"Available Flow" is the minimum of the stream flow at that point on the river and all downstream locations. It is often quite different than the physical flow at that point on the river. Within StateMod, "Available Flow" is tracked and adjusted as each water right is operated by priority. However, the "Available Flow" printed to the diversion summary report (*.xdd) is the final value after all water rights have been operated. Therefore, "Available Flow" is the quantity of water that might be available to a future user at that location who would be the most junior in the system.

In addition, the "Available Flow" is often an indicator on why a structure may be shorted. In general, if the reported Available Flow is greater than zero, then a structure may be shorted only if it is limited by capacity or decree. The "Available Flow" may not be an indicator of why a structure is shorted if the structure is controlled by an operating rule or if the user has imposed limits on when the model will be allowed to reoperate (see the variable ireopx in the control (*.ctl) file). The control file (*.ctl) variables *icall* and *ccall* allow a user to evaluate the transient nature of the "Available Flow" value for an individual water right as it is operated in priority.

7.6 Daily Model Approach

The State Model allows a daily analysis to be performed with or without monthly data being provided. In general providing and preparing a monthly model first is recommended for the following reasons:

- The most difficult part of a basin study is understanding the system. By first developing a monthly model, the system operation can be investigated without burdening the user with the volume of information required for a daily model.
- By requiring monthly data daily baseflow generation is not required. Of course if daily baseflows are developed then the sum of daily baseflows will equal monthly baseflow estimates.
- A daily model is typically developed to be able to simulate large and small flow events that occur within a monthly time step. Therefore although daily streamflow data will be required, the user may want to estimate the other terms required for daily analysis, such as diversion demands or reservoir targets, using a simplified approach. As presented in the table below StateMod provides six options to provide daily data as follows: 1. Estimating daily data to be the average of monthly data, 2. Using the same gage ID as a daily pattern, 3. Using another gage's ID as a daily pattern, 4. Providing daily data, 5. Using a pattern developed by connecting the midpoints of monthly data, or 6. Using a pattern developed by connecting the end points of monthly data.

Option #	Distribution Code	Daily ID Code for Station ID	Description	Controlling Data (1)
1	0	0	Daily data are estimated to be the average of monthly data	Monthly
2	1	Station ID	Daily data are estimated using the daily pattern provided under the station ID	Monthly
3	2	Another Station's ID	Daily data are estimated using the daily pattern provided under another station's ID	Monthly
4	3	3	Daily data are provided in a daily file	Daily
5	4	4	Daily data are estimated by connecting the midpoints of monthly data.	Monthly
6	5	5	Daily data are estimated by connecting the endpoints of monthly data	Monthly

(1) For example monthly data controls if the sum of daily data does not equal the monthly data

- As described above, if both daily and monthly data are provided for the same structure and the daily data does not sum to the monthly total, the type of daily distribution specified determines which data (monthly or daily) takes precedence. For example, when option 2 is selected, daily data are used to distribute the monthly value to daily values regardless of what the sum of the daily values equal. Similarly, when option 3 is selected and the sum of daily data does equal the monthly value, the daily values are used.

- For the case where a user supplies monthly data and a representative gage to use for daily data the sum of daily data typically equals the monthly total. Daily data may not equal the monthly total if the representative gage with daily data contains all zeros.
- The routing of daily streamflows is accounted for by the gain and loss term that results from the base (natural) stream flows estimated by or provided to the model.
- Routing of reservoir releases are not included because 1. StateMod is a primarily a planning model, 2. The additional detail required to properly implement reservoir releases with a travel time component is not justified since the system would have to include some kind of forecasting to know when a reservoir release is required before a reservoir demand actually occurs and 3. The volume of water potentially delivered early by ignoring a reservoir's travel time is offset by the potential over release that occurs after the demand is satisfied.
- StateMod allows a user to estimate daily demands by providing a monthly total that is decreased each day in the month that a diversion occurs (see the control file (*.ctl) variable *iday*). This "daily decrementing" capability can be important when simulating a ditch with a significant flood right that typically only diverts a few days a month. When this option is used for ditches without a significant flood right, water rights or canal capacity typically limit the amount diverted in a day. When this option is used the ability to limit reservoir release to occur only when an IWR exists is also recommended (e.g. see the operating rule file (*.opr), type 3, variable *iopsou(4,1)*).

StateMod's ability to use or estimate daily data requires the user be extremely careful when assigning a daily for a given structure. Following are four examples successfully used in prior StateMod applications. The first two examples (**Tables 7.6.1 and 7.6.2**) perform a daily analysis using monthly naturalized (base) flow results. The last two examples (**Table 7.6.3 and 7.6.4**) perform a daily analysis by first calculating daily naturalized (base) flows.

Table 7.6.1 is an example used for a typical Historic Calibration run with Monthly Naturalized (Base) flows. It does not perform a daily naturalized (base) flow analysis to estimate daily naturalized (base) flows. Instead it uses monthly naturalized (base) results and disaggregates them to daily values using historic daily data at a stream gage. Daily diversion data are used to estimate daily historic diversion demands and instream flow demands. Interpolation routines are used to estimate daily reservoir targets and well demands. Note that Daily Diversion Demands are typically equal to Daily Historic Diversions for a Historic Calibration run. Also daily instream flow demands often change from one value to another on a specified day of the month that requires daily data.

Table 7.6.1
Typical Daily ID Assignment for a Historic Calibration Run with Monthly Naturalized (Base) Flows

File	Daily ID	Comment
River Station (*.ris)	USGS Gage ID	Estimate daily streamflows by distributing Monthly Baseflows to daily values using daily data at a stream gage. Note the monthly totals in the monthly baseflow file (*.rim or *.xbm) control.
Diversion Station (*.dds)	3	Daily diversion data (*.ddd) is used to estimate Daily Demands. Note the daily data controls.
Reservoir Station	5	Estimate daily reservoir targets by connecting the endpoints of data in the Monthly Target file (*.eom).
Instream Flow Station	3	Daily instream flow demand data (*.ifd) is used to estimate Daily Demands. Note the daily data controls.
Well Station	4	Estimated daily well demands by connecting the midpoints of data

		in the Monthly Well Demand (*.wem) file.

Table 7.6.2 is an example used for a typical Daily Calculated Calibration or Daily Baseline run. Similar to the Historic Calibration run it does not perform a daily baseflow analysis to estimate daily streamflows. Instead it uses monthly baseflow results and disaggregates them to daily values using historic daily data at a stream gage. Daily data are used to estimate daily instream flow demands. Interpolation routines are used to estimate daily diversion demands, daily reservoir targets and well demands. Note that Daily Diversion demands are estimated using an interpolation approach because it is the most appropriate technique to estimated future daily diversion demands. Also the approach used to estimate daily reservoir targets, instream flow demands and well demands are the same as those used in **Table 7.6.1**.

Table 7.6.2
Example Daily ID Assignment for a Daily Calculated Calibration or Daily Baseline Run with Monthly Baseflows

File	Daily ID	Comment
River Station (*.ris)	USGS Gage ID	Estimate daily streamflows by distributing Monthly Baseflows to daily values using daily data at a stream gage. Note the monthly totals in the monthly baseflow file (*.rim or *.xbm) control.
Diversion Station (*.dds)	4	Estimated daily diversion demands by connecting the midpoints of data in the calculated monthly demand (*C.ddm) file.
Reservoir Station	5	Estimate daily reservoir targets by connecting the endpoints of data in the calculated monthly reservoir target file (*C.tam)
Instream Flow Station	3	Daily instream flow demand data (*.ifd) is used to estimate Daily Demands. Note the daily data controls.
Well Station	4	Estimated daily well demands by connecting the midpoints of data in the Monthly Well Demand (*.wem) file.

Table 7.6.3 is an example used for a Daily Historic Calibration Run with Daily Naturalized (Base) Flows. Unlike the example described in **Table 7.6.1** this example does perform a daily baseflow analysis to estimate daily streamflows. Note that daily data are used for streamflow, diversions and instream flows. Interpolation routines are used to estimate daily reservoir contents and daily reservoir targets. An interpolation approach is used for reservoirs and wells because daily reservoir and well data are typically unavailable.

Table 7.6.3
Example Daily ID Assignments for a Daily Historic Calibration Run with Daily Naturalized (Base) Flows

File	Daily ID	Comment
River Station (*.ris) for Natural Flows	3	For the naturalized flow (baseflow) run, use the daily streamflow data located in the Daily Historic Streamflow file (*.riy). For a simulation run, use the daily naturalized (baseflow) streamflow data located in the Daily Streamflow file (*.rid or *.xby) created by the daily baseflow module.
Diversion Station (*.dds) for Baseflows	3	For the naturalized flow (baseflow) run, use the Daily Historic Diversion data (*.ddy) to estimate daily historic diversions. For the simulation run, use the Daily Diversion Demand data (*.ddd)

		to estimate daily historic demands.
Reservoir Station	5	For the naturalized flow (baseflow) run, estimate daily reservoir end-of-day contents by connecting the endpoints of data in the monthly reservoir target file (*.eom). For the simulation run, estimate daily reservoir targets by connecting the endpoints of data in the Monthly Reservoir Target file (*.tam).
Instream Flow Station	3	For the naturalized flow (baseflow) run, instream flows are not required because they are non consumptive. For the simulation run, use daily instream flow demand data (*.ifd) .
Well Station	4	Estimated daily well demands by connecting the midpoints of data in the Monthly Well Demand (*.wem) file.

Table 7.6.4 is an example used for a Daily Calculated or Baseline Run with Daily Naturalized (Base) Flows. Unlike the example described in **Table 7.6.2** this example does perform a daily baseflow analysis to estimate daily streamflows. Note that the naturalized (base) runs use daily data for streamflow and diversions. The simulation run uses an interpolation routine for diversion demands and well demands because it is the most appropriate technique to estimate future daily diversion demands. Using a different approach for diversions during a naturalized (base) flow run and a simulation run, requires a different diversion station file be used for each. Interpolation routines are again used to estimate daily historic reservoir contents and daily reservoir targets for both the naturalized (base) and simulation runs because daily reservoir data are typically unavailable.

Table 7.6.4
Example Daily ID Assignments for a Daily Calculated or Baseline Run with Daily Naturalized (Base) Flows

File	Daily ID	Comment
River Station (*.ris) for Natural Flows	3	For the naturalized flow (baseflow) run, use the daily streamflow data located in the Daily Historic Streamflow file (*.riy). For a simulation run, use the daily naturalized (baseflow) streamflow data located in the Daily Streamflow file (*.rid or *.xby) created by the daily baseflow module.
Diversion Station (*.dds) for Baseflows	3 for a naturalized (base) flow run and 4 for a simulation run	For the naturalized flow (baseflow) run, use the Daily Historic Diversion data (*.ddy) to estimate daily historic diversions. For the simulation run, use the Daily Diversion Demand data (*.ddd) to estimate daily historic demands.
Reservoir Station	5	For the naturalized flow (baseflow) run, estimate daily reservoir end-of-day contents by connecting the endpoints of data in the monthly reservoir target file (*.eom). For the simulation run, estimate daily reservoir targets by connecting the endpoints of data in the Monthly Reservoir Target file (*.tam).
Instream Flow Station	3	For the naturalized flow (baseflow) run, instream flows are not required because they are non consumptive. For the simulation run, used daily instream flow demand data (*.ifd).
Well Station	4	For both the naturalized flow (baseflow) run and the simulation run estimated daily well demands by connecting the midpoints of data in the Monthly Well Demand (*.wem) file.

7.7 Daily Vs. Monthly Results

One activity performed during the validation of StateMod's daily algorithms compared the results of a daily model to a monthly model by dividing all appropriate daily terms (demands, streamflows and delay patterns) by the number of days in a month (see example ex1d.*). Results were found to be significantly different, with the daily model providing less water than a monthly model because a monthly model allows all immediate (same month) return flows to be available to a junior diverter while a daily model is limited by the amount that returns on day 1, day 2, day 3, …. As shown below for a 30 day month, a monthly model that diverts 1,000 ac-ft at 50% efficiency and return 50% in the immediate (diverting) month will have 250 ac-ft available to a junior diverter. A daily model that returns 50% in the immediate (diverting) day will have only 129.167 ac-ft available to a junior diverter in that month.

```
Monthly Total (1,000*.50*.50)  =       250 ac-ft

Day 1 = (1,000/30*.50*.50/30)  =       0.2778 ac-ft
Day 2 = Day 1 + 0.2778         =       0.5556 ac-ft
Day 3 = Day 2 + 0.2778         =       0.8333 ac-ft
   …
Daily Total                    =       129.167 ac-ft
```

Note, 1. The daily results presented above can be easily replicated in a spreadsheet, 2. Daily results could more closely match monthly results if the appropriate daily return pattern is known. The above example, that estimated the daily pattern to be a monthly pattern divided by the number of days, is probably unrealistic. 3. The difference between a daily and monthly model decrease significantly after 1-2 months of an irrigation season.

7.8 Direct Solution Algorithm

StateMod calculates the amount of water diverted according to the following Direct Solution Algorithm:

Diversion = Min (Capacity, Physically Available, Legally Available, Demand)

Where:
- Capacity is self-explanatory.
- Physically Available is the minimum of available flow plus immediate return flows at the diversion and all downstream nodes.
- Legally Available is the water right.
- Demand is self-explanatory.

Following is an example using the simple 5 node network presented in the following figure. As shown in the figure, Dem_1 returns to ISF_1. Similarly Dem_2 returns to Dem_1; Dem_ returns to ; and ISF_1 is located at –the bottom of the river system. For simplicity, this example uses average efficiency and assumes the capacity and legal availability are not limiting. Also, calculations are shown only at river nodes where a diversion or instream flows are located. Following are other key data:

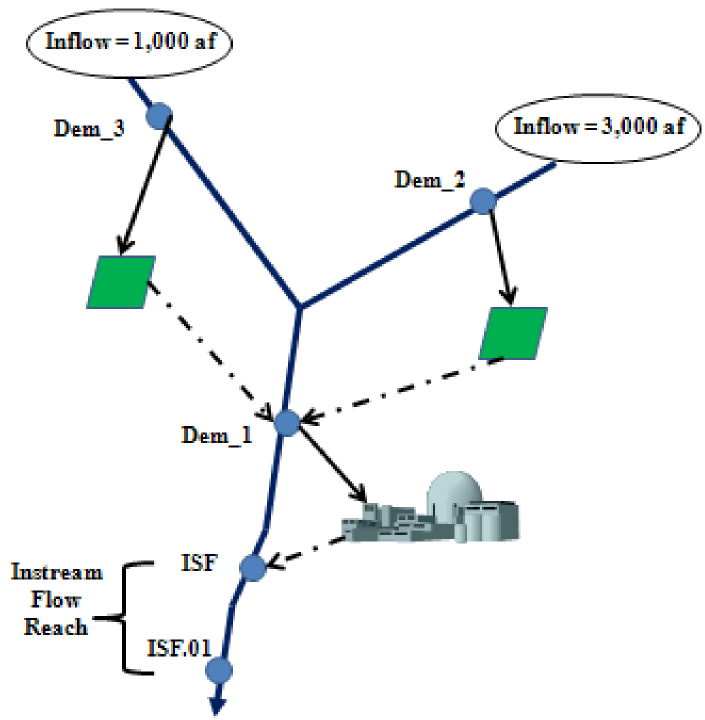


Table 7.8
Direct Solution Algorithm Data

Structure	Priority	Location	Demand	Average Efficiency (%)	Immediate Return (%)
Dem_1	1	Dem_1	2,000 ac-ft	20	40
Dem_2	2	Dem_2	3,000 ac-ft	50	50
Dem_3	3	Dem_3	1,000 ac-ft	50	50
ISF_1	4	ISF_1 to ISF.01	65 cfs	0 (1)	100 (1)

The following sequence of steps corresponds to the water right loop that occurs for each time step within StateMod. They demonstrate a key component of the Direct Allocation Algorithm that allows the diversion to be calculated directly as a function of the available flow and immediate return flows without having to iterate.

Step 1 Priority 1 M&I Diversion at Dem_1 wants 2000 AF

Because capacity and legal availability (water right) are assumed to not limit the diversion by Dem_1 is the minimum of the physically available water (available flow at Dem_1 and every other river node downstream) and the demand. Since the minimum available flow is 4,000 and the demand is 2,000, a diversion of 2,000 is allowed using the following formula:

Diversion = Min (Capacity, Physically Available, Legally Available, Demand)

Immediate return flows are then calculated and the available flow adjusted for the next priority as follows (Note as shown in Table 1 Dem_1 has an efficiency of 20% an immediate return percent of 40% and returns water to ISF_1).

Return = Divert * (1.00 - efficiency) * (immediate return)

Return = 2000 * (1.00 - .20) * (.40) = 640

Result Priority 1 (Dem_1) diverts 2000 AF and available flow is adjusted to include immediate return flows (see Available Flow-2)

River ID	Available Flow-1	Diversion (-)	Immediate Returns (+)	Available Flow-2
Dem_3	1000	0	0	1000
Dem_2	3000	0	0	3000
Dem_1	**4000 (1)**	2000	0	2000
ISF_1	4000	2000	640	2640

(1) Minimum of Available Flow plus Immediate Returns occurs at this river node

Step 2 Priority 2 Irrigation Diversion at Dem_2 wants 3000 AF

Recall that the capacity and legal availability (water right) are assumed to not limit. Therefore, the diversion by Dem_2 is the minimum of the physically available water (available flow) and the demand. Since the minimum available flow is 2,000 at Dem_1and the demand is 3,000 the diversion is limited to the available flow. This structure may benefit from immediate return flows as follows.

Divert = Min(Available Flow + Return)

Return = Divert * (1.00 - efficiency) * (immediate return)

Divert = Available Flow + Divert * (1.00-efficiency) * (immediate return)

Divert = Available Flow + Divert *.25

Divert = Available Flow / 0.75

Divert = 2000 / .75 = 2667

Immediate return flows are then calculated and the available flow adjusted for the next priority as follows (Note as shown in Table 1 Dem_2 has an efficiency of 50% an immediate return percent of 50% and returns water to River ID 60).

Return = Divert * (1.00 - efficiency) * (immediate return)

Return = 2667 * (1.00 - .50) * (.60) = 667

Result Priority 2 diverts 2667 AF and available flow is adjusted to include immediate return flows (see Available Flow-2)

River ID	Available Flow-1	Diversion (-)	Immediate Returns (+)	Available Flow-2
Dem_3	1000	0	0	1000
Dem_2	3000	2667	0	333
Dem_1	**2000 (1)**	2667	667	0
ISF_1	2640	2667	667	640

(1) Minimum of Available Flow plus Immediate Returns occurs at this river node

Step 3 Priority 3 Irrigation Diversion at Dem_3 wants 1000 AF

Recall the capacity and legal availability (water right) are assumed to not limit. Therefore, the diversion by Dem_1 is the minimum of the physically available water (available flow) and the demand. Since the minimum available flow is 0 at Dem_1 the diversion is zero. Note because the available flow is zero and this structure cannot benefit from any immediate return flows.

Result Priority 3 diverts 0 AF and available flow is the same (see Available Flow-2)

Note the available flow is 0 at Dem_1 that confirms the structure took the maximum possible without driving the river negative.

River ID	Available Flow-1	Diversion (-)	Immediate Returns (+)	Available Flow-2

Dem_3	1000	0	0	1000
Dem_2	333	0	0	333
Dem_1	**0 (4)**	0	0	0
ISF_1	640	0	0	640

(4) Minimum of Available Flow plus Immediate Returns occurs at this river node.

Step 4 Priority 4 Instream Flow Demand at ISF_1 wants 65 cfs (3898 AF)

Recall that the capacity and legal availability (water right) are assumed to not limit. Therefore, the diversion by ISF_1 is the minimum of the physically available water, available flow at ISF_1 and every other river node downstream and the demand. Since the minimum available flow is 640 and the demand is 3,898, a diversion of 640 is allowed using the following formula:

Diversion = Min (Capacity, Physically Available, Legally Available, Demand)

Result Priority 4 diverts 640 AF and available flow is adjusted to include immediate return flows (see Available Flow-2)

Note priority 4 diverted water while priority 3 did not. That occurs because of where the diversion is located versus where water is physically available.

River ID	Available Flow-1	Diversion (-)	Immediate Returns (+)	Available Flow-2
Dem_3	1000	0	0	1000
Dem_2	333	0	0	333
Dem_1	0	0	0	0
ISF_1	**640 (5)**	640	640	640

(5) Minimum of Available Flow plus Immediate Returns occurs at this river node.

In summary the Direct Solution Algorithm is as follows:

For every water right

1. Estimate the diversion using Available flow as a surrogate for as physically available flow using the following:

Diversion = Min (Capacity, Physically Available, Legally Available, Demand)

Where available flow is evaluated at every river node from the diversion downstream

2. If the diversion is not limited to available flow the diversion is known and goes to step 4.

3. If the diversion is limited to available flow, calculate physically available flow at every downstream node using the following:

Divert = min(Available Flow / (1.00- ((1.0-efficiency) * Immediate Return))

Where physical availability includes the location and the % of each immediate return flow to be known.

4. Calculate return flows, adjust available flow and go to next water right.

5. Go to Step 1 for next right.

7.9 Modified Direct Solution Algorithm

In order to allow StateMod to operate with a variable efficiency and soil moisture storage the Modified Direct Solution Algorithm was developed (Bennett, Ray R. December 2000). The following enhancements were required.

- StateMod must be provided a maximum efficiency value. This is implemented by setting the control file (*.ctl) variable *ieffmax* = 1 and providing maximum efficiency data for each structure for each year in the annual time series file (*.ipy). Note this file is formatted to be the same as the annual time series file used by the consumptive use model, StateCU, except annual irrigated acreage has been added to the end of the file, column 10.
- StateMod must be provided a structure's Consumptive Use Requirement (CUR). This was implemented by setting the control file (*.ctl) variable *itsfile* = 3 or 10. Note for non-agricultural water rights, the CUR is simply the consumptive, not total, demand.
- The Direct Solution Algorithm was revised as follows:

The Modified Direct Solution Algorithm is as follows:

For every water right:

1. Estimate the diversion using Available flow as a surrogate for physically available flow using the following:

Diversion = Min (Capacity, Physically Available, Legally Available, Demand)

Where available flow is evaluated at every river node from the diversion downstream

2. If the diversion is not limited by available flow the maximum diversion is known.

2a. Calculate consumptive use as the minimum (Diversion * maximum efficiency, CUR), soil moisture storage as diversion less consumptive use up to the maximum efficiency and soil moisture capacity, total return flow as the Diversion - consumptive use - soil moisture storage, immediate return flow as the total return flow * immediate return %, and adjusted available flow as available flow less the diversion plus any immediate returns.

2b. Go to Step 1 for next water right.

3. If the diversion is limited to available flow the maximum diversion could include benefit from immediate return flows.

3a. Calculate diversion at every downstream node using the following: (Note by using maximum efficiency the minimum diversion, maximum consumptive use and minimum return flow are calculated.

Divert = min(Available Flow / (1.00-max. efficiency) * (immediate return))

Where physical availability includes the location and the percent of each immediate return flow.

3b. Calculate consumptive use as the minimum (Diversion * maximum efficiency, IWR), soil moisture storage as zero, total return flow as the Diversion - consumptive use, immediate return flow as the total return flow * immediate return %, and adjusted available flow as available flow less the diversion plus any immediate returns.

3c. If the diversion is limited to available flow the maximum diversion has been calculated. Go to Step 1 for the next water right.

3d. If the diversion is not limited to the available flow, more water can be diverted but no additional CU can occur (Step 3b ensures the maximum consumptive use has occurred). Therefore the diversion can be increased as follows (Note the diversion is still limited to the water right, capacity and demand).

Divert = Divert + minimum (available flow / immediate return flow)

3e. Calculate consumptive use as the minimum (Diversion * maximum efficiency, CUR), soil moisture storage as diversion less consumptive use up to the maximum efficiency and soil moisture capacity, total return flow as the Diversion - consumptive use - soil moisture storage, immediate return flow as total return flow * immediate return %, and adjusted available flow as available flow less the diversion plus any immediate returns.

3f. Go to Step 1 for next water right.

7.10 Demand Considerations

StateMod allows demands for direct diversions and wells to be specified by structure as a total or as an irrigation water requirement by month or by year (12 values repeated year after year). The following are noted:

- When a total demand is provided for a direct diversion structure the variable *idvcom* of the direct diversion station file (*.dds) should be set to 1 for monthly data and 2 for annual data. Similarly for a well structure the variable *idvcomw* of the well station file (*.wes) should be set to 1 for monthly data and 2 for annual data (annual data option for wells is reserved but not yet active). By providing total demand data StateMod recognizes that a structures demand includes inefficiencies associated with conveyance and on farm irrigation practices. The fate of inefficient water is controlled by the return flow data provided. This standard approach is recommended when wells are not part of an analysis.
- When an irrigation water requirement is provided for a direct diversion structure the variable *idvcom* of the direct diversion station file (*.dds) should be set to 3 for monthly data and 4 for annual data. Similarly for a well structure the variable *idvcomw* of the well station file (*.wes) should be set to 3 for monthly data and 4 for annual data (annual data option for wells is reserved but not yet active). By providing an irrigation water requirement as demand data StateMod recognizes that a structure's demand does not includes losses associated with conveyance and on farm irrigation practices. Therefore these adjustments are done within StateMod "on the fly" using the efficiency data provided in the direct diversion station file (*.dds) and the well station file (*.wes). The fate of inefficient water is controlled by the return flow data provided. This approach is recommended when wells are part of an analysis since the system efficiency associated with surface water and ground water are often significantly different.
- When wells are being simulated, the control variable *icondem* of the control file (*.ctl) controls how demand data are provided to and treated by StateMod.
    - **Historic Demand Approach**. Set *icondem* = 1 to indicate surface water demands are provided in the diversion demand file (*.ddm), well demands are provided in the well demand file (*.wem) and no addition to determine a total structure demand occurs. This means that any surface water shortages cannot be supplied by ground water and vice versa. Also, the diversion and well station demand type variables (*idvcom* and *idvcomw*) are typically set to 1 or 3 which means monthly total demands (1) or monthly Irrigation Water Requirement demands (3) will be provided. Note this option is typically used during a historic model calibration when historic diversions and pumping are known.
    - **Historic Sum Demand Approach** . Set *icondem* = 2 to indicate surface water demands are provided in the diversion demand file (*.ddm), well demands are provided in the well demand file (*.wem) and they are added together to determine a total structure demands. This means that any surface water shortages for a structure can be supplied by ground water and vice versa. The priority of the surface and ground water rights (limited by water right, capacity, etc.) dictates which source (surface water or ground water) will try to supply water. Also, the diversion and well station demand type variables (*idvcom and idvcomw*) is typically set to 1 or 3 which means monthly total demands (1) or monthly Irrigation Water Requirement demands (3) will be provided in the monthly well demand file (*.wem). This option is typically used during a calculated calibration to quantify the impact of what occurs when priorities dictate the water supply source.
    - **Structure Demand Approach**. Set *icondem* =3 to indicate one demand is provided for structures served by both surface and ground water in the direct diversion demand file(s) (*.ddm and .dda). For well only lands demand is provided in the well demand file

(*.wem). Similar to when *icondem* = 2, this means that any surface water shortages for a structure can be supplied by ground water and vice versa. The priority of the surface and ground water rights (limited by water right, capacity, etc.) dictates which source (surface water or ground water) will try to supply water. Also, the well station demand type variable (*idvcomw*) is typically set to 6 which means demands will be provided in the direct diversion demand file (.ddm) and no demand data are expected in the monthly well demand file. The diversion station demand type variable (*idivcom*) dictates if the data provided in the monthly demand file (*.ddm) is total demand or Irrigation Water Requirement. This option is typically used during a calculated model calibration and a baseline run when a structure's total demand is known but the mixture of surface water and ground water supplies is not.

- **Supply Demand Approach**. Set *icondem* = 4 to indicate data are provided in the same way as when icondem=3 (e.g. for structures with both a surface and ground water supply one demand is provided in the direct diversion demand file(s) (*.ddm) and for well only lands demand is provided in the well demand file (*.wem)). Named the "Supply Demand Approach", this method requires the variable efficiency method be operational (control variable *ieffmax=1*). It allows surface water and ground water demands to operate somewhat independently. Like all demand options surface and ground water use under the Supply Demand Approach are dictated by the priority of each source and when diversion or pumping occurs the structures CIR is reduced as a function of the efficiency of the supply source. The Supply Demand Approach allows surface water to be diverted up to the user-supplied demand even if there is no CIR. Ground water is only allowed to pump when a CIR exists. This option is typically used during a calculated model calibration and a baseline run to better match historic operations. Its net effect is to 1. Divert surface water up to the user specified demand when available and in priority regardless of how efficient or inefficient that surface water will be used, and 2. Pump ground water only when there is a CIR. Note it operates most effectively in conjunction with the sprinkler option which allows a structure to pump preferentially on lands with sprinklers but still divert surface water to meet both CIR and recharge demands.
- **Decreed Demand Approach**. Set *icondem* = 5 to indicate data are provided in the same way as when icondem=3 or 4 (e.g. for structures with both a surface and ground water supply one demand is provided in the direct diversion demand file(s) (*.ddm) and for well only lands demand is provided in the well demand file (*.wem)). Named the "Decreed Demand Approach", this method requires the variable efficiency method be operational (control variable *ieffmax=1*) and operates surface and ground water supplies exactly the same as when icondem=4. In addition, the Decreed Demand Approach overrides demand data provided for structures with both surface and ground water supplies to equal the total of their surface water decrees if there is a CIR in that time step. Like the Supply Demand Approach, the Decreed Demand Approach 1. Allows surface water to be diverted up to the user-supplied demand (water rights) even if there is no CIR and 2. Allows ground water to be pumped only when a CIR exists. This option is typically used during a calculated model calibration and a baseline run to better match historic operations. Note it operates most effectively in conjunction with the sprinkler option which allows a structure to pump preferentially on lands with sprinklers but still divert surface water to meet both CIR and recharge demands.

Note that the Supply Demand Approach (*icondem=4*) and Decreed Demand Approach (*icondem=5*) could be extended to assist in determining when to use reservoir supplies (i.e. only make a reservoir release if a CIR exists). StateMod allows reservoir releases to occur only when an IWR exists by specifying the efficiency of water use (variable iopsou(2) of the operation right file) to the reservoir efficiency.

7.11 Variable Efficiency Considerations

StateMod allows efficiency to vary from 0 to a user specified maximum value. The following are noted:

- Variable efficiency uses the Modified Direct Solution Algorithm (Section 7.9).
- Variable efficiency requires the control file (*.ctl) variables *itsfile* and *ieffmax* be set appropriately. When the control variable *itsfile* is set to 10 conveyance, maximum flood and sprinkler efficiency data provided by structure and year are used. When the control variable *ieffmax* is set to 1, irrigation water requirement (IWR) data provided for every diversion and well only structure by year is used.
- Variable efficiency capability calculates the maximum system efficiency for a diversion to be the conveyance efficiency times the maximum flood efficiency provided in the annual time series file (*.ipy).
- Variable efficiency capability calculates the maximum system efficiency for a well to be the maximum flood efficiency or maximum sprinkler efficiency provided in the annual time series file (*.ipy). The control file variable *isprnk* controls whether flood or sprinkler efficiency data are used. Sprinkler efficiency is used preferentially up to the acres served by sprinklers. Thereafter, any remaining acres served by wells are served by using the maximum flood efficiency.
- Variable efficiency capability applies to all direct diversion, well pumping and carrier to diversion structure operations.
- Variable efficiency capability uses data in the irrigation water requirement (IWR) file (*.iwr), even if diversion data are provided as IWR data. This allows the model to attempt to provide a demand that is significantly greater than a structure's irrigation water requirement times its maximum efficiency.
- Variable efficiency capability and its associated efficiency data provided in the annual time series file (*.ipy) override the efficiency data provided in the diversion station (*.dds) file and well station (*.wes) file. When the variable efficiency capability is used, the efficiency data provided in the diversion station (*.dds) file and well station (*.wes) file is only used to calculate a headgate or well head demand when demand data are provided as a consumptive irrigation requirement.
- Variable efficiency can be used with or without soil moisture storage (see Section 7.13).

7.12 Priority of Water Use by Wells Serving Sprinklers

StateMod allows the priority of water use by wells serving sprinklers to be specified by the user. The following are noted:

- For both baseflows and simulations, the Priority of water use by wells requires the control file (*.ctl) variables *itsfile* and *ieffmax* be set appropriately. When the control variable *itsfile* is set to 4 or 10 the sprinkler acre and efficiency data provided by structure and year are used. When the control variable *ieffmax* is set to 1, irrigation water requirement (IWR) data provided for every diversion and well only structure by year is used. In addition, the annual time series file

(*.ipy) variable *gwmode* controls the priority of wells serving sprinklers using two approaches; Maximum Supply and Mutual Supply. As described in Section 4.39, the Maximum Supply Mode (*gwmode* = 1) allows a structures demand to be served by wells with sprinklers first, then surface water, then wells with flood irrigation. The Mutual Supply Mode (gwmode = 2) serves a structures demand by surface water first, wells with sprinklers first, then surface water, then wells with flood irrigation

- During a simulation run a Sprinkler Use operating rule (type 21, Section 4.13.21) must be used to specify the administration number (priority) of sprinkler well use. This allows the user to quantify what "first" means for the Maximum Supply Mode (wells with sprinklers first). If an operating rule is not provided, well water rights operate in a simulation mode using data provided in the well water right (*.wer) file and sprinkler use is controlled by the control file (*.ctl) variable *isprnk*.
- During a baseflow run operating rule data are never read. Therefore baseflows are calculated using a maximum Supply Mode if the annual time series file (*.ipy) variable *gwmode* is set to 1 and the control file (*.ctl) variables are set as follows: *itsfile* = 10, *ieffmax* = 1, *isprnk* = 1. If any of the above are not set appropriately the Mutual Supply mode is used.

7.13 Soil Moisture Accounting

The State Model has the ability to include soil moisture as a water supply. The following are noted:

- The soil moisture capacity is calculated as follows:

  SM = D * A * C

  Where:
  SM = Soil Moisture
  D = Soil Depth (typically 0-3 feet)
  A = Area (data provided in the annual time series (*.ipy) file).
  C = Soil Moisture Capacity (data provided in the soil parameter (*.par) file)

- The Soil Moisture option allows water to be stored in the soil zone up to its capacity and the diverting structures (direct diversion or well) efficiency.
- StateMod initializes the soil moisture reservoir contents to be 50% of the soil moisture capacity.
- If the irrigated area of a structure is reduced from one year to the next and the resulting soil moisture capacity is exceeded any water in excess of the capacity is estimated to be a loss from attributed to that structure.
- The Soil Moisture option requires the variable efficiency option (see Section 7.11) be used.
- The Soil Moisture option operates in both the simulation and baseflow modes.
- In a simulation mode, the Soil Moisture option uses an operating rule to specify an administration date that controls when water is available to be taken out of the soil zone to satisfy a consumptive (not total) demand. In order to represent water use when historic diversions are provided as a demand this operating rule allows water to be taken out of the soil zone when a structure's consumptive irrigation water requirement exists even if the user has specified the structures demand to be zero.
- In the baseflow mode, the Soil Moisture option takes water out of the soil zone to satisfy a consumptive (not total) demand after surface water and well water use occurs. In order to represent water use in a baseflow mode water can be taken out of the soil zone when a

structure's consumptive irrigation water requirement exists even if the user has specified the structures diversion and pumping to be zero.

7.14 Distribution of Reservoir Water Rights to Accounts

The State Model has the ability to assign a reservoir (storage) right to one or more accounts. The following are noted:

- To assign a reservoir water right to a specific account the variable *iresco* of the reservoir right file (*.rer) is set to the account number specified in the reservoir station file (*.res).
- To assign a reservoir water right to serve all accounts the variable *iresco* of the reservoir right file (*.rer) is set -n where n is the first n accounts specified in the reservoir station file (*.res). When storage occurs water is distributed accordingly to the ratio of space available in each account. For example if 30,000 AF is diverted to two accounts that have 20,000 AF and 40,000 AF of space available (account capacity - current capacity); the first account will receive 10,000 AF and the second will receive 20,000 AF. Note if a reservoir fills in most years this approach to distribute reservoir water rights typically works well. However, this approach can result in one reservoir account receiving what may be determined to be an inappropriate share of a reservoirs water right; simply because they typically have less of their available space in use. For such a case it is recommended the storage right be broken into a number of sub-rights which are assigned to each account directly. This approach has the additional benefit of being able to properly implement the one-fill rule between accounts.

7.15 Reservoir Demands

The State Model has several operating rules that allow water to be released from a reservoir to a direct flow diversion including operating rule types 2, 3, 4, 10, 11 and 14. The following are noted:

- Releases are limited to available water in the source reservoir and account, the capacity of the structure, the maximum flow in the river, and the structure demand. For a type 4, Exchange, reservoir releases are limited to the exchange potential in the intervening reach.
- When the variable efficiency option is not used (i.e. variable *ieffmax = 0* from the control (*.ctl) file) reservoir deliveries equal the ditch's demand when the operating right fires. This option is always used when the variable efficiency option is not used and may be useful for a historic calibration run.
- When the variable efficiency option is used (i.e. variable *ieffmax = 1* from the control (*.ctl) file) reservoir deliveries when the operating right fires are limited as follows:

  Demand = min(D, CIR/n)

  Where D = the ditch's demand when the operating right fires

  CIR = the structures Consumptive Irrigation requirement

  n = the efficiency specified as variable *iopsou(4,1)* in the operating rule control file. Note n is limited to not exceed the maximum efficiency of the structure to minimize reservoir operations.

This option can be used only when the variable efficiency option is used and is appropriate for a calculated calibration.

7.16 Detailed Call Data

The State Model has the ability to print detailed call data for a diversion, reservoir or instream flow by setting the control file (*.ctl) call variable (***icall***) = 1 and the call right variable (***ccall***) to the water right of interest. The following are noted:

- Detailed call output is limited to a diversion, reservoir or instream flow right (i.e. operating rules and wells are not currently supported).
- Results are printed to the *.log file for each iteration. Note that the call can change during a time step if new water (e.g. reservoir releases and non-downstream return flow) become available (see Section 7.17 for additional discussion). Therefore results are printed for every iteration of every time step and the volume of output can be quite large.
- Although the output is limited to when a decree is operating, the volume of water reported as diverted in the detailed output is for the entire structure, not just the right.

7.17 Model Reoperation

System operations, return flows to non-downstream river nodes, and well pumping have the potential to add "new water" to a river which might be available to a senior water right. For example, when a reservoir releases water to meet a target storage level, additional water may become available to a senior downstream right. Similarly, if a ditch returns water to a neighboring non-downstream tributary, a senior ditch on that tributary may use those return flows. Finally when the return flow associated with well pumping exceeds its depletion to the river, additional water may become available to a senior downstream right. The following are noted:

- When "new water" becomes available because of a system operation, non-downstream return flow or net accretion, the model automatically reoperates all water rights in priority in order that senior rights may benefit from the additional water supply.
- The user can control the number of iterations by adjusting the control (*.ctl) file reoperation variable (***ireopx***). This variable allows the user to turn off the reoperation capability or specify a volume before reoperation occurs. Both of these activities can impact results but may be an efficient method of operation if the user is interested in testing a new structure or feature and performance is an issue.
- If the user wants to force a reoperation at a specific administration date, a type 12 operating rule can be specified.

7.18 San Juan Recovery Program RIP

The State Model has the ability to simulate the San Juan River Recovery Program Recovery Implementation Plan (SJRIP). The following are noted:

- The SJRIP is implemented by turning on the control (*.ctl) file San Juan Recovery variable (***isjrip***) to 1.
- The SJRIP requires a file of perturbation data provided by a sediment transport analysis to be added to the response (*.rsp) file and provided as input to the model.
- The SJRIP requires a type 20 operating rule be specified.
- Additional details of the SJRIP can be obtained from the report JSRIP Hydrology Model Documentation (March 24, 2000) or by contacting the Colorado Water Conservation Board.

7.19 Model Performance

The State Model performance depends on a number of factors including the computer speed, time step (daily or monthly), delay table size, number of river nodes, number of water rights, reservoir operations, and reoperation control. In general the bigger the model (nodes, diversions, etc.) and smaller the time step (daily Vs monthly) the slower. The following table presents some recent performance information for a relatively large model developed for the Rio Grande basin in Colorado (see Table 7.19.1). As presented in Table 7.19.2 a monthly model ranges from 0.06 to 0.35 minutes per year on two different machines. Similarly a daily ranges from 0.24 to 3.13 minutes per year on a faster machine with a different sized delay table.

Table 7.19.1
Performance Example Model Size

Item	Number
River Nodes	702
Diversions	435
Reservoirs	22
Instream Flow Reaches	30
Well Only Lands	322
Total Water Rights	2,870

Table 7.19.2
Performance Data

Machine	Time Step	Max Delay Table Size	**Performance** (min/yr)
P-III 486 MHz	Monthly	240 months	0.35
P-III 486 MHz	Daily	240 days	2.40
P-III 486 MHz	Daily	87,600 days	24.4
P-IV 1.5 GHz	Monthly	240 months	0.06
P-IV 1.5 GHz	Daily	240 days	0.24
P-IV 1.5 GHz	Daily	87,600 days	3.13

7.20 Replacement Reservoir Operations

The general replacement reservoir operating rule (type 10) provides a method to supply reservoir water to a large number of structures without supplying individual operating rules for each. The replacement reservoir operating rule checks whether reservoir replacement water will be supplied to a diversion by a direct reservoir release or exchange. The replacement reservoir-operating rule has generic applications but was originally developed to handle the replacement reservoir obligations of Green Mountain Reservoir in the Colorado River Basin. Additional details associated with its operation are as follows:

- It serves all water rights which are senior to its Administration number which have variable the variable "ireptyp" of the Direct Diversion Station File (*.dds) set to offset a diversion (1) or a depletion (-1).
- The ability to release for depletion is currently only active for exchanges (i.e. it is not operational for a direct reservoir to diversion release). The impact of this limitation is offset by StateMod's ability to reoperate after every reservoir release.
- When more than one replacement reservoir is specified, they are sorted by Administration number and operate by priority, most senior first.
- The replacement reservoir-operating rule applies to direct flow structures only. Therefore carrier systems must be tied to a replacement reservoir directly.
- The need to call a replacement reservoir is checked after every direct flow water right is operated. Replacement operations are called only if the right is senior to the most senior replacement reservoir's administration number and it is water short. The replacement routine then checks if a replacement can be provided and ensures that the replacement amount does not exceed the structure's water right, capacity and demand.
- The replacement reservoir operating rule logic is controlled by subroutine Replace. This routine organizes and calls standard StateMod subroutines that control a direct reservoir release (DivresP2) and a reservoir exchange (DivrplP). Therefore reservoir operations are exactly the same when a reservoir operates as a replacement reservoir as they are when the reservoir operates as a standard reservoir.
- Total releases from a replacement reservoir can be limited to monthly or annual volumetric limits (see Section 7.38 Reservoir Release Limits).

7.21 Binary Output Files

StateMod prints a variable number of direct access binary output files, depending on the types of structures and time step (monthly or daily) being simulated. This section describes the contents of the three major structure types (direct diversion, reservoir and wells) for both monthly and daily time steps.

7.21.1 Monthly Binary Direct Diversion File

StateMod prints a monthly direct access binary diversion binary file (*.b43) that describes water use at each river node. The record length is **160 bytes**. The units of every data value are ft**3/s. This section describes the content of that file. Note the **data presented in bold** was added with StateMod Version 11.0. A typical read statement is as follows:

```
Irecs = ((iy-iystr0)*12 + (im-1))*numsta + is + numtop

Read(43,rec=irecs) (dat(i), i=1,ndiv)
```

Where:

Irecs	= the binary record to read
iy	= the year of interest

iystr0	= the starting year
im	= the month of interest
numsta	= the total number of stream nodes
is	= the stream node of interest
numtop	= the total number of header cards (numsta+numdiv+numifr+numres+numrun+numdivw+5+3*maxparm+2)
dat(i)	= the data read
ndiv	= the number of diversion data elements (maxparm)

Row-data	Variable	Description
1-1	CodeName	Program Name
1-2	ver	Program version
1-3	Vdate	Program version date

Row-data	Variable	Description
2-1	iystr0	Beginning year of simulation
2-2	iyend0	Ending year of simulation

Row-data	Variable	Description
3-1	numsta	number of river nodes
3-2	numdiv	number of diversions
3-3	numifr	number of instream flows
3-4	numres	number of reservoirs
3-5	numown	number of reservoir owners (active and inactive)
3-6	nrsact	number of active reservoirs
3-7	numrun	number of base flows
3-8	numdivw	number of well structures (D&W and Well only)
3-9	numdxw	number of well only structures
3-10	**maxparm**	**number of parameters for a diversion, reservoir and well**
3-11	**ndivO**	**number of data elements in the *.b43 output file**
3-12	**nres0**	**number of data elements in the *.b44 output file**
3-12	**nwelO**	**number of data elements in the *.b45 output file**

Row-data	Variable	Description
4-1	xmonam(1-14)	Month corresponding to the year type e.g. xmonam(1) = Jan for a calendar yr. xmonam(1) = 10 for a water year, etc.

Row-data	Variable	Description
5-1	mthday(1-12)	Days per month (e.g. if xmonam(6) = June mthday(6)=30 if xmonam(6) = March mthday(6) = 31

Row-data	Variable	Description
6-1	j	Counter
6-2	cstaid(j)	Station ID
6-3	stanam(I,j), I=1,6)	Station Name

Repeat for j=1, numsta (number of river nodes)

Row-data	Variable	Description
7-1	j	Counter
7-2	cdivid(j)	Diversion ID

7-3	divnam(I,j), I=1,6)	Diversion Name
7-4	idvsta(i)	River Node

Repeat for j=1, numdiv (number of diversions)

Row-data	**Variable**	**Description**
8-1	j	Counter
8-2	cifrid(j)	Instream flow ID
8-3	xfrnam(I,j), I=1,6)	Instream flow Name
8-4	ifrsta(i)	River Node

Repeat for j=1, numifr (number of instream flows)

Row-data	**Variable**	**Description**
9-1	j	Counter
9-2	cresid(j)	Reservoir ID
9-3	resnam(I,j), I=1,6)	Reservoir Name
9-4	irssta(i)	River Node
9-5	iressw(i)	On (1) / Off(0) Code
9-6	nowner(i)	# of owners

Repeat for j=1, numres+1 (number of reservoirs)

Row-data	**Variable**	**Description**
10-1	j	Counter
10-2	crunid(j)	Base Flow ID
10-3	runnam(I,j), I=1,6)	Base Flow Name
10-4	irusta(i)	River Node

Repeat for j=1, numrun (number of base flows)

Row-data	**Variable**	**Description**
11-1	j	Counter
11-2	cdividw(j)	Well ID
11-3	divnamw(I,j), I=1,6)	Well Name
11-4	idvstw(i)	River Node

Repeat for j=1, numdivw (number of wells)

Row-data	**Variable**	**Description**
12-1	**j**	**Counter**
12-2	**paramD(j)**	**Diversion Parameter**

Repeat for j=1, maxparm (number of parameters)

Row-data	**Variable**	**Description**
13-1	**j**	**Counter**
13-2	**paramR(j)**	**Reservoir Parameter**

Repeat for j=1, maxparm (number of parameters)

Row-data	**Variable**	**Description**
14-1	**j**	**Counter**
14-2	**paramW(j)**	**Well Parameter**

Repeat for j=1, maxparm (number of parameters)

Row-data	**Variable**	**Description**
15-1	**unit(1-nx)**	**Units for each data type in a file Where nx is ndivO for *.b43, ndivR for *.b44, and ndivW for *.b42**

Row-data	**Variable**	**Description**

16-1	dat(1)	Total Demand (Total_Demand)
16-2	dat(2)	CU Demand (CU_Demand)
16-3	dat(3)	Priority Diversion (From_River_By_Priority)
16-4	dat(4)	Storage Diversion (From_River_By_Storage)
16-5	dat(5)	Exchange Diversion (From_River_By_Exchange)
16-6	**dat(6)**	**River Loss (From_River_Loss)**
16-7	dat(7)	From Well (From_River_By_Well)
16-8	dat(8)	Carrier by Priority (From_Carrier_By_Priority)
16-9	dat(9)	Carrier by Exchange (From_Carrier_By_Storage)
16-10	dat(10)	Carried Water (Carried_Water)
16-11	**dat(11)**	**Carried Loss (Carried_Loss)**
16-12	dat(12)	From Soil (From_Soil)
16-13	dat(13)	Total Supply (Total_Supply)
16-14	dat(14)	Total Short (Total_Short)
16-15	dat(15)	CU Short (CU_Short)
16-16	dat(16)	CU (Consumptive_Use)
16-17	dat(17)	To Soil (To_Soil)
16-18	dat(18)	Total Return (Total_Return)
16-19	dat(19)	Loss (Loss)
16-20	dat(20)	Upstream Inflow (Upstream_Inflow)
16-21	dat(21)	Reach Gain (Reach_Gain)
16-22	dat(22)	Return Flow (Return_Flow)
16-23	dat(23)	Well Depletion (Well_Depletion)
16-24	dat(24)	To_From GWStor (To_From_GW_Storage)
16-25	dat(25)	River Inflow (River_Inflow)
16-26	dat(26)	River Divert (River_Divert)
16-27	dat(27)	River by Well (River_By_Well)
16-28	dat(28)	River Outflow (River_Outflow)
16-29	dat(29)	Available Flow (Available_Flow)
16-30	dat(30)	Diversion by an instream Flow (Divert_For_Instream_Flow)
16-31	dat(31)	Diversion to Power (Divert_For_Power)
16-32	dat(32)	Diversion from Carrier by Storage (Diversion_From_Carrier)
16-34	**dat(34)**	**Released from plan. (This includes 1. Water diverted into then released from a plan and 2. Water released from a plan to a carrier that returns water to the river)**
16-35	**dat(35)**	**Structure type see Table 7.2.1 below**
16-36	**dat(36)**	**Number of structures at this node**
16-37	**dat(37)**	**Calling river node (-1 means NA)**
16-38	**dat(38)**	**Calling right amount (-1 means NA)**

Repeat for every river node numsta
Repeat for every month of simulation
[1] Field 16-33 is a placeholder that currently contains the same data as field 16-19 (loss)

Table 7.21.1
Structure Type Codes

Code (na)	Structure Type
< 0	Baseflow node[1]
< 10,001	Baseflow node only[1]
0	Well Only
1-5,000	Diversion
5,001 - 7,500	Instream Flow

7,501 - 10,000	Reservoir

[1]Note a code of 1 indicates a diversion, a code of -1 indicates a diversion with at baseflow, a code of –10001 indicates a baseflow node only.

7.21.2 Monthly Binary Reservoir File

StateMod prints a direct access binary reservoir file (*.b44) that describes water supply and use for each reservoir and account. The record length is **160 bytes**. The units of every value are ft**3/sec. This section describes the content of that file. Note a typical read statement is as follows:

Irecs = ((iy-iystr0)*12 + (im-1))*nrsactx + ir1 + numtop

Read(44,rec=irecs) (dat(i), i=1,nres)

Where:

- Irecs = the binary record to read
- iy = the year of interest
- iystr0 = the starting year
- im = the month of interest
- nrsactx = the total number of active reservoirs (nract) and total number of active nd inactive accounts (numown) (i.e. nrsactx = nrsact + numown)
- ir1 = the reservoir account of interest (the first account is always the reservoir total)
- numtop = the total number of header cards (See 7.21.1)
- dat(i) = the data read
- nres = the number of reservoir data elements (29)

Fields 1-15 are exactly the same as the Binary Direct Diversion file.

Row-data	Variable	Description
16-1	dat(1)	Initial Storage (Initial_Storage)
16-2	dat(2)	Priority Diversion (River_Priority)
16-3	dat(3)	Storage Diversion (River_Storage)
16-4	dat(4)	Exchange Diversion (River_Exchange)
16-5	dat(5)	River Loss (River_Loss)
16-6	dat(6)	Carrier by Priority (Carrier_Priority)
16-7	dat(7)	Carrier by Sto_Exc (Carrier_Storage)
16-8	dat(8)	Carrier Loss (Carrier_Loss)
16-9	dat(9)	Total Supply (Total_Supply)
16-10	dat(10)	Storage Use (Storage_Use)
16-11	dat(11)	Storage Exchange (Storage_Exchange)
16-12	dat(12)	Carrier Use (Carrier_Use)
16-13	dat(13)	Total Reservoir Release (Total_Release)
16-14	dat(14)	Reservoir Evaporation (Evap)
16-15	dat(15)	Seepage and Spill (Seep_Spill)
16-16	dat(15)	Simulated EOM Contents (Sim_EOM)
16-17	dat(17)	EOM Target Limit (Target_Limit)
16-18	dat(18)	One Fill Limit (Fill_Limit)
16-19	dat(19)	River Inflow (River_Inflow)
16-20	dat(20)	Total Reservoir Release (Total_Release)
16-21	dat(21)	Total Reservoir Supply (Total_Supply)
16-22	dat(22)	River by Well (River_By_Well)
16-23	dat(23)	River Outflow (River_Outflow)
16-24	dat(24)	Reservoir Carry (Reservoir_Carry)
16-25	dat(25)	Reservoir Loss (Reservoir_Loss)

```
16-26          dat(26)             Reservoir Seepage (Reservoir_Seep)
16-27          dat(27)             Reservoir account number
                                   Note 0 = total(ridr)
16-28          dat(28)             Number of accounts for this reservoir
                                   (acc)
16-29          dat(29)             Reservoir (rnr)

Repeat for every reservoir account
Repeat for every reservoir
Repeat for every month of simulation
```

7.21.3 Monthly Binary Well File

StateMod prints a direct access binary well file (*.b42) that describes water supply and use for each well structure. The record length is 92 bytes. The units of every value are ft**3/sec. This section describes the content of that file. Note a typical read statement is as follows:

Irecs = ((iy-iystr0)*12 + (im-1))*numdivw + nw + numtop

Read(42,rec=irecs) (dat(i), I=1,ndivw)

Where:

Irecs	= the binary record to read
iy	= the year of interest
iystr0	= the starting year
im	= the month of interest
numdivw	= the total number of wells
nw	= the well of interest
numtop	= the total number of header cards (see Section 7.21.1)
dat(i)	= the data read
ndivw	= the number of well data elements (18)

Fields 1-14 are exactly the same as the Binary Direct Diversion file.

```
Row-data      Variable            Description
15-1           dat(1)              Total Demand (Total_Demand)
15-2           dat(2)              Consumptive Use Demand (CU_Demand)
15-3           dat(3)              From Well (From_Well)
15-4           dat(4)              From Surface Water (From_SW)
15-5           dat(5)              From Soil Moisture (From_Soil)
15-6           dat(6)              Total Supply (Total_Supply)
15-7           dat(7)              Total Shortage (Total_Short)
15-8           dat(8)              Consumptive Use Short (CU_Short)
15-9           dat(9)              Total Consumptive Use (Total_CU)
15-10          dat(10)             To Soil Moisture (To_Soil)
15-11          dat(11)             Total Return (Total_Return)
15-12          dat(12)             Loss (Loss)
15-13          dat(13)             Total Use (Total_Use)
15-14          dat(14)             From River (From_River)
15-15          dat(15)             To or From Ground Water Storage
                                   (To_From_GW_Storage)
15-16          dat(16)             From Salvage (From_Salvage)
```

```
15-17          dat(17)              From Soil Moisture (From_Soil)
15-18          dat(18)              Total Supply (Total_Supply)

Repeat for every well
Repeat for every month of simulation
```

7.21.4 Daily Binary Direct Diversion File

StateMod prints a daily direct access binary diversion binary file (*.b49) that describes water use at each river node and day. The record length is **160 bytes**. The units of every value are ft**3/sec. This section describes the content of that file. Note a typical read statement is as follows:

Irecs = ((iy-iystr0)*12 + (im-1))*numsta*31 + is + numtop

Read(49,rec=irecs) (dat(i), i=1,ndiv)

Where:
All terms are the same as defined for the Monthly Direct Diversion File

7.21.5 Daily Binary Reservoir File

StateMod prints a daily direct access binary reservoir file (*.b50) that describes water use at each reservoir and account by day. The record length is 160 bytes. The units of every value are ft**3/sec. This section describes the content of that file. Note a typical read statement is as follows:

Irecs = ((iy-iystr0)*12 + (im-1))*nrsactx + ir1 + numtop

Read(50,rec=irecs) (dat(i), i=1,nres)

Where:
All terms are the same as defined for the Monthly Direct Diversion File

7.21.6 Daily Binary Well File

StateMod prints a daily well file (*.b65) that describes water use for each well structure. The record length is 92 bytes. This section describes the content of that file. The units of every value are ft**3/sec. Note a typical read statement is as follows:

Irecs = ((iy-iystr0)*12 + (im-1))*numdivw*31 + nw + numtop

Read(65,rec=irecs) (dat(i), I=1,ndivw)

Where:
All terms are the same as defined for the Monthly Direct Diversion File

7.22 Equal Administration Numbers

StateMod allocates water by priority. Therefore if the administration number of two water rights equal then data are allocated in the order it is read within a file and between data files follows: instream flows, reservoirs, diversions, operating rights and wells. If the above is not appropriate for simulating equal administration numbers then it is recommended the water right be broken into sub rights or that a multiple plan ownership (type 46) operating rule be used.

The following example demonstrates the sub right approach for two rights that have the same administration number of 100.00; one for 10 cfs and another for 5 cfs. As presented, the original water rights have been broken into 5 sub water rights that sum to the original but have a slightly different administration numbers that allows each to divert some water when the supply is limiting.. Note more resolution can be obtained by providing any number of sub rights (5, 10, 100, …).

Section 7.46 describes the multiple plan ownership approach that allows more than one structure with the same administration number to be modeled as if they were multiple owners in a single water right. When the multiple ownership approach is used, the decreed amount should equal the sum of each user and only one location in the river network can be specified.

Right Type	**Water Right A Admin. Number**	**Water Right A Amount (cfs)**	**Water Right B Admin. Number**	**Water Right B Amount (cfs)**
Original	100.00	10.0	100.00	5.00
Sub Right 1	100.00	2.0	100.01	1.0
Sub Right 2	100.02	2.0	100.03	1.0
Sub Right 3	100.04	2.0	100.05	1.0
Sub Right 4	100.06	2.0	100.07	1.0
Sub Right 5	100.08	2.0	100.09	1.0

7.23 Plan Operations

StateMod includes a “Plan” structure type that allows terms and conditions associated with a water transfer or reuse plan or transmountain import to be simulated. The following are noted:

- Section 4.49 describes the data associated with a plan that includes its ID, name and location in the stream network.
- StateMod currently supports 12 types of plans as follows:
    1. A **T&C Plan** (type 1**)** is used to store a future obligation associated with the transfer of water from one structure to another. For example a water right transfer might require historic return flows be maintained as part of the water right transfer. When a T&C plan is specified, StateMod calculates the obligation on-the-fly for the month it occurs and all associated future months. Future returns and/or depletions are estimated using the same delay information specified for the source structure or in the operating rule that includes the T&C plan. Note that a type 43 operating rule can be used to satisfy a future T&C demand if there is water available diversion in priority.

2. A **Well Augmentation Plan** (type 2**)** is used to store a future obligation to return water to the river (augmented) when a well depletes the river when it is out of priority. When a Well Augmentation plan is specified, StateMod calculates the current and future obligation on-the-fly for the month it occurs and all associated future months. Future returns and/or depletions are estimated using the same delay information specified for the source well. Note that a type 43 operating rule can be used to satisfy a future well augmentation demand if there is water available diversion in priority.

3. A **Reservoir Re-Use Plan** (type 3) is used to store a reusable water supply that associated with a reservoir. Because it is located in the reservoir, any unused water can be carried over to the next month.

4. A **Diversion Reuse Plan** (type 4) is used to store a reusable water supply associated with a diversion. Because it is associated with a diversion, any unused water must be spilled since it cannot be carried over to the next month.

5. A **Transmountain Reservoir Reuse Plan** (type 5) is similar to a reservoir reuse plan but it is associated with a transmountain import.

6. A **Transmountain Diversion Reuse Plan** (type 6) is similar to a diversion reuse plan but it is associated with a transmountain import.

7. A **Transmountain Import Plan** (type 7) is used to account for imported water which, in many cases, may be used to extinction. The return flows associated with a type 7 plan are typically stored in a type 5 or type 6 plan.

8. A **Recharge Plan** (type 8) is used to store a water supply that originated from reservoir or canal seepage. Because its return to the river is controlled by a unit response table, it accrues to the river as a supply even if it is not assigned to a demand.

9. A **Out of Priority Plan** (type 9) is used to store a future obligation associated with water that is diverted out of priority.

10. A **Special Well Augmentation Plan** (type 10) is used to store the depletion associate with a well that is not required to be augmented. Examples include pumping in a designated basin or pumping by a well which has been decreed to be non tributary (e.g. the "coffin wells). A special augmentation plan is often used to demonstrate every well is assigned to a well; even if some are not required to augment their depletions.

11. An "A**ccounting Plan** (type 11) is used to "temporarily" divert water in priority which may subsequently be used at a later point in the priority system or by a number of other structures. For example, water may be diverted into an accounting plan to "temporarily store" an diversion which may or may not be used if a junior water right is allowed to divert. Similarly, water may be diverted into an accounting plan which is subsequently released to a number of different users.

12. A "**Release Limit Plan**" is used to limit a release.

- Plans are located on the stream network at the location where the plan is to be implemented. For example if the terms and conditions of a transfer require historic return flows be maintained at the transfer location, then a Term and Condition (T&C) Plan should be located just downstream of the transfer location. Similarly if a reuse plan allows releases from a water treatment plant to be reused then a Non Reservoir ReUse Plan should be located just below the treatment plant discharge.

- If a plan is not specified as a part of an operating rule, StateMod warns the user but assumes there are no terms and conditions to be imposed.
- T&C Plans operate within the river and water right system as follows:
    1. T&C demands are calculated when the exchange or bypass is operated.
    2. Supplies to a T&C Plan are reported as From River by Storage or From River by Exchange or Plan in the standard stream node report (*.xdd).
    3. Total Returns equal Total Supplies in the standard stream node report (*.xdd) because the T&C Plan is non-consumptive.
    4. All activities associated with a T&C Plan are summarized in the plan output file (*.xpl).
    5. All activities associated with an operating rule are summarized in the operating rule output file (*.xop).
- Non Reservoir Re-Use Plans operate within the river and water right system as follows:
    1. Reuse water gets stored in the Non Reservoir ReUse Plan automatically when an exchange or bypass occurs (i.e. reuse water does not get returned to the system then rediverted into a Non Reservoir ReUse Plan). This automatic routing of water to a Non Reservoir ReUse Plan results in less return flows to the system from the source structure.
    2. The amount routed to a Non Reservoir ReUse Plan is reported as Carried Water in the standard stream node report (*.xdd).
    3. The amount released from a Non Reservoir ReUse Plan by an operating rule is reported as a negative diversion (inflow) at the plan location in the standard stream node report (*.xdd).
    4. All activities associated with a Non Reservoir ReUse Plan are summarized in the plan output file (*.xpl).
    5. All activities associated with an operating rule are summarized in the operating rule output file (*.xop).
- Reservoir ReUse Plans operate within the river and water right system as follows:
    1. Reuse water gets stored in the destination reservoir and associated ReUse Reservoir Plan automatically when an exchange or bypass occurs.
    2. The amount routed to a ReUse Reservoir Plan is reported in the standard reservoir report (*.xre).
    3. The amount stored by a ReUse Reservoir Plan is also reported in the station balance portion of the standard stream node report (*.xdd).
    4. All activities associated with a ReUse Reservoir Plan are summarized in the plan output file (*.xpl).
    5. All activities associated with an operating rule are summarized in the operating rule output file (*.xop).
- Accounting Plans operate within the river and water right system as follows:
    1. Changed water rights gets stored in the Accounting Plan automatically when an exchange or bypass occurs (i.e. reuse water does not get returned to the system then rediverted into an Accounting Plan).
    2. The amount routed to an Accounting Plan is reported as From River by Priority in the standard stream node report (*.xdd).
    3. The amounts released from an Accounting Plan are reported as From River by Exchange Plan in the standard stream node report (*.xdd).
    4. All activities associated with an Accounting Plan are summarized in the plan output file (*.xpl).

5. All activities associated with an operating rule are summarized in the operating rule output file (*.xop).

- Transmountain Import Plans operate within the river and water right system as follows:
  1. Transmountain imports are specified as a negative diversion in the diversion demand (*.ddm) file
  2. The Transmountain Import Plan ID in the plan file (*.pln) and Import Diversion ID in the station file (*.dds) should be the same.
  3. All activities associated with a Transmountain Import Plan are summarized in the plan output file (*.xpl).
  4. All activities associated with an operating rule are summarized in the operating rule output file (*.xop).

7.24 Release or Exchange for Depletion Vs Diversion

Several of StateMod's operating rules allow reservoir releases and exchanges to meet a either a depletion or a diversion amount. The following are noted:

- A depletion is defined as follows:

  *Depletion = Diversion * (1-Efficiency) * ReturnFlow(1);*

  Where:
  Efficiency is the efficiency of water use and
  ReturnFlow (1) is the return flow that occurs at the same time step as the diversion.

- The general formula for a release or exchange to meet a diversion is as follows:

  Release = min(Demand, Capacity, Supply, Available Flow).

  Where:
  Demand is the structure demand
  Capacity is the demand structures or carriers remaining capacity
  Supply is the water supply available from the source
  Available Flow is the minimum water available in the exchange reach (not used if a direct release)

- The general formula for a release or exchange to meet a depletion is as follows:

  Release = min(Depletion, Capacity, Supply, Available Flow)

  Where:
  All terms are defined above.

- In general a reservoir release or exchange can be made to offset a depletion if an engineering study has determined appropriate values for efficiency and return flow patterns.
- Because return flows may accrue to one or more locations within a river network, the amount available to offset a depletion varies depending on where demands and return flows occur on the river. Depletion locations are specified as part of the well structure (*.wes) data. Depletion demands are specified as part of the plan structure (*.pln) data.
- When a reservoir release or exchange is made to offset a depletion StateMod checks to ensure the total diversion amount is available at the destination structure and that the net depletion to the stream does not impact any senior water rights or, for an exchange, the exchange reach to go negative.
- If a user specifies a release or exchange be made to offset a depletion and the supply is limiting, StateMod may release or exchange the entire diversion in order to meet a demand.

7.25 Downstream Call

A type 23 operating rule allows a downstream call to be provide which limits any upstream diversions, reservoir storage, etc. that are junior to the call's administration number. The following comments are provided to assist in the use and interpretation this operating rule:

- The downstream call must be tied to an instream flow station.
- Call data are specified as a time series in a file named "Downstream_Call (*.cal)" (see Section 4.1 Response Data and Section 4.13.23). Note for a monthly model the call on day 1 is used to estimate the call for that month.
- The amount of water controlled by a downstream call is the minimum of its instream flow water right, its demand, and the available flow in the river when it is called. If the user wants to control the entire flow below a downstream call structure a large decreed amount and demand should be specified.
- For a free river the downstream call's administration number should be entered as the most junior water right in the basin (e.g. 999999).
- The downstream call's administration number specified in the operation right file should be the most junior in the basin. This ensures it is not called as an operating rule prior to a consumptive (diversion, well, reservoir) water right.
- If the quantity of water associated with a downstream call is known then it is recommended the user model it as a standard instream flow (see Section 4.7).

7.26 Call (Control) Reporting

StateMod allocates water based on available supply, demand, water rights and capacity using the prior appropriation doctrine (first in time, first in right). Therefore it never has the need to "call out" a structure because a structure only diverts if it is in priority, supply is available and it has capacity. However StateMod does report a control location and control right that, in many but not all cases, occurs where a structure has historically set a call on the river. This information can be a useful for calibration. The approach used by StateMod to identify a controlling (call) location and right is as follows:

- If a structure is shorted because of available supply, then the "control location" where a downstream water supply limit occurs is identified. If there is a structure (diversion, instream flow, and reservoir) at the "control location", the "control structure" is identified.
- If a "control structure" does not exist at the "control location" because of natural stream losses, etc. StateMod reports the control structure as "NA".
- If a "control structure" has been identified the "control right" is calculated based on the amount diverted at the "control structure" and the prior appropriation requirement that its senior decrees diverts water before its junior decrees. For example, if the control structure is diverting 100 cfs and it has two rights; one senior for 60 cfs and one junior for 200 cfs then the junior is the controlling right (because the senior is fully satisfied).
- If a "control structure" does not exist, StateMod records the control right as –1 (for not applicable).
- More than one "control structure" and "control right" can occur in a given time step.

- As defined herein, the "control structure" may not necessarily be water short, it is simply the structure that limits an upstream structure from diverting its full water right.
- If a structure benefits from new (non-native) water resulting from a reservoir release or non-downstream return flows then StateMod recalculates the "control location" and "control right" accordingly.
- If the water supply limit ("control location") occurs at the diverting structure itself, it is by definition not a "control location". In such a case StateMod reports the "control location" as "Hgate_Limit" (head gate limit) and the call right as –1.
- If there is no "control location" but a structure is shorted, StateMod reports the call structure as "Cap/Wr_Limit" (capacity or water right limit) and the "control right" as –1.
- Control (call) reporting is currently operational for direct, instream and reservoir rights. Future enhancements may address a call associated with an operational rule.
- The "control location" and "control right" are reported for every structure and time step in the structure summary file (*.xdd). In addition, unique controls (independent of who they are impacting) are reported to the call (control) output file (*.xca).
- If the standard StateMod naming convention is followed and the identifier used at a stream node is the same identifier used for a structure then the "control location" reported in the diversion summary file (*.xdd) is the same as the "control structure". If the standard naming convention is not followed then the call structure can be identified as the structure located at the control location.

7.27 Direct Flow Exchange or Bypass

A type 24 operating rule allows a direct flow diversion's water right to be exchanged to another direct flow structure or reservoir. Similarly a type 25 operating rule allows a direct flow diversion's water right to be bypassed to another direct flow structure or reservoir. The exchange or bypass can occur from the river or by a carrier. The following comments are provided to assist in using and interpreting this operating rule:

- This operating rule controls both the source and exchanged (destination) diversion or storage. Therefore any shortages at the source location are shared at the destination based on ownership of each.
- The user can supply data that limits the bypass or exchange to a percent ownership of the source water right.
- The user can supply data that limits the bypass or exchange to the consumptive use of their portion of the water right.
- The efficiency of water use for the bypassed or exchanged water is set in the plan (*.pln) file. It may be set to a constant efficiency for all months, a constant value for each of 12 months or to the efficiency of the source water right structure.
- The user can supply a "plan ID" that allows terms and conditions associated with the direct flow bypass or exchange to be operated. For example if the bypass or exchange requires historic return flows be left at the head gate then StateMod can automatically assign these return flow obligations to a "plan" which can subsequently be tied to a water supply via an operating rule.
- The user can specify a "plan ID" that allows reuse of the bypassed or exchanged water.

- Because a direct flow right may be used to serve both a direct flow right and the exchange or bypass right, the administration number assigned to the operating rule is used in the analysis (i.e. it is not overridden by the source water rights administration number).
- Direct flow bypass or exchange may be controlled over a season by using the monthly on/off switch (imonsw(im)).
- Monthly and Annual exchange limits may be specified.
- The amount available for exchange is the minimum physical water available, remaining decree of the exchanging right (e.g. some of the decree may have been used for direct diversion purposes), the exchange potential between the destination and exchange locations, the monthly and annual exchange limit and the destination structures capacity. The amount available for bypass is the same listed above without including the exchange potential between the destination and bypass locations.

7.28 La Plata Compact

A type 13 operating rule allows an instream flow to operate based on its location on the river and the flow at an upstream stream gage. This rule has generic applications but was originally developed to handle the La Plata River compact in the San Juan River Basin. This compact, in general, calculates Colorado's commitment to deliver water to New Mexico based on the flow at an upstream, index gage. The following are noted:

- The compact demand and location should be modeled as an instream flow.
- The compact operations are controlled by a type 13 operating rule.
- Compact demands are calculated “on-the-fly” to be the minimum of 1. the instream flow (compact) water right, 2. the specified percent (e.g. 50%) of the flow at the compact gage (e.g. 09365500), 3. the instream flow demand and 4. the available flow at the instream flow.
- Because the compact demands are calculated “on-the-fly” the information printed under the column titled ‘demand’ in the stream summary file (*.xdd) is the minimum of 1. the specified percent (e.g. 50%) of the flow at the compact gage (e.g. 09365500) and 2. the instream flow demand provided in the stream monthly (*.ifm) or constant monthly (*.ifa) instream flow demand files.
- If a very senior administration number is specified for the Type 13 operating rule, the demand is typically equal to the natural (base) stream flow plus any lagged returns to the gage from upstream diversions in a prior time step times the specified percent (e.g. 50%) .
- To obtain additional details on the calculations associated with this operating rule the control file variables ***ichk*** and ***ccall*** should be set to 113 (operating rule 13) and 3329990.01 (the operating right ID for the La Plata Compact). Details are provided in the StateMod log file (*.log).
- Monthly on/off switches may be specified in the operating rule file. If the monthly on/off switch is on, the demand printed to the diversion station output file (*.xdd) is the demand calculated “on-the-fly”. If the monthly on/off switch is off, the demand printed to the diversion station file (*.xdd) is zero, regardless of the value specified in the instream flow demand file (*.ifa)

7.29 South Platte Compact

The South Platte Compact requires Colorado deliver 120 cfs to Nebraska from April 1 to October 15 at an administration date of June 14, 1897 without calling out any diversions located upstream of the Washington County line (i.e. upstream of Water District 64). Because StateMod operates water rights from senior to junior the Washington County limitation was implemented using two operating rules; a type 50 rule is used to temporarily store water available to the South Platte compact in a plan in priority and a type 40 rule is used to release water from the plan to 1) any structure that is water short and not located in water district 64 and 2) to the compact itself. The South Platte compact is implemented as follows:

1. The compact is modeled as a plan structure with a 120 cfs instream flow demand from April 1 to October 15 with a priority of June 14, 1897.
2. Water rights senior to the compact throughout the river system divert in priority to meet their demands.
3. When in priority, the Compact plan diverts and "temporarily holds" water in an administrative plan using a type 50 operating rule.
4. The physical water in the river at the compact inflow flow location is credited to the instream flow demand.
5. Water rights junior to the Compact thorough out the river system divert in priority to meet their demands.
6. If a water right is short and not located in Water District 64, a type 40 operating rule is used to determine if n exchange potential exist which will allow a junior water right to exchange water from the compact plan to meet their unmet demand. This check occurs immediately following the priority of a water right that is short.
7. If an exchange potential exist, water will be exchanged to the diversion limited by the structures demand, water right and capacity. In addition return flows will be calculated, a reoperation will occur and potentially allow water rights throughout the system to divert more water to meet their demands.
8. If an exchange potential does not exist, the water stays in the administrative plan. Note that an exchange potential does not exist when there is another water right other than the compact that is calling the river.
9. Once all junior water rights have tried to satisfy their demand under their own water rights or by exchange with the Compact Plan, any water remaining in the Compact plan is released to the Compact itself using a type 40 operating rule assigned the most junior administration number in the basin.

The following comments are provided to assist in implementing and using this capability on the South Platte River:

- The South Platte compact should be located just downstream of the Julesburg gage so that all the gains and losses upstream of Julesburg are included.
- The type 50 operating rule turns off the source instream flow right so that it is completely controlled by the type 50 operating rule.
- The administration number assigned to the operating rule used to store water in the South Platte Compact plan (type 50) should be 17332.00000, the value associated with its decreed priority of June 14, 1897.
- The administration number assigned to the operating rule used to release water from the South Platte Compact to any water right not located in water district 64 is not used since this operating rule is called immediately following the priority of any water right that is water short and not located in water district 64.
- The administration number assigned to the operating rule used to release water from the South Platte Compact to the compact itself should be the most junior in the basin.

7.30 Well Augmentation Requirement

StateMod calculates the depletion at a stream associated with well pumping in the current time step and all future time steps based on the amount pumped, the efficiency of its use, and its associated depletion data (e.g. unit response function). In addition, if a well water right is tied to an augmentation plan any depletion (augmentation requirement) associated with out of priority pumping is stored in that plan in the current and all future time steps. The augmentation requirement is the difference between the well's depletion on the river and the accretions from any associated return flows. These augmentation requirements may be satisfied by a number of sources including:

1. In-priority depletions from the stream from pumping in the current time step.
2. In-priority depletions from the stream from pumping in prior time steps. By operating rule 43.
3. A reservoir by using operating rule type 48
4. A reuse plan by operating rule 48
5. A recharge plan by operating rule 48
6. A diversion by operating rule 38
7. An augmentation well by operating rule 37
8. A recharge area by operating rule 48

The following comments are provided to assist in using and interpreting this operating rule:

- In order to determine if pumping and future depletions occur in-priority, a well must be tied to an augmentation plan (see **Section 4.49**).
- The augmentation requirement (demand) associated with any out of priority pumping is the difference between the well's depletion on the river and the accretions from any associated return flows. This demand is calculated in the month the pumping occurs and all future time steps when depletions or accretions will occur at the stream.
- The augmentation requirement is implemented at the augmentation plans location in the network. This location can be important because it will determine how much, if any, depletions may be offset by return flows. Also it is important because the location is used to determine if pumping is occurring in priority.
- Pumping is determined to be in priority at the time step it occurs if there is water available in the stream to offset any net depletions at that time. Therefore it is allocated at the administration number of the well.
- Future depletions associated with pumping in a prior time step are determined to be in priority if there is water available in the stream to offset the net depletions at the time they impact the river. Because future depletions are stored by augmentation plan, not well, this determination is made at the administration number assigned to the In-Priority Supply Operating Rule (type 43).
- It is impractical to determine if future depletions are in priority using the administration number of each well because there are often more than a thousand wells being modeled and future depletions from each may extend over 20 years. In addition, this estimate is considered appropriate for a planning model because wells are typically junior to most direct flow and storage rights.
- The administration number assigned to an In-Priority Supply Operating Rule (type 43) is typically calculated to be a decree weighted administration number of the augmentation plan wells.

7.31 Reservoir Recharge (Seepage) as an Augmentation Supply

StateMod allows the location and timing associated with recharge (seepage) from a reservoir (or recharge site) to be used as an augmentation supply. The following comments are provided to assist in implementing and using this capability:

- Reservoir recharge (seepage) is calculated as a function of storage (see Input Data for the Reservoir Station File (*.res)).
- Reservoir recharge (seepage) may be routed to any number of stream locations using any number of unit response functions.
- Reservoir recharge (seepage) return flow properties (location and timing) must be provided in a reservoir return flow file (*.rrf).
- If a reservoir return flow file (*.rrf) is not provided in the response (*.rsp) file any reservoir seepage (recharge) is estimated to be a loss to the system.
- Reservoir recharge (seepage) can become an augmentation supply if it is 1. Associated with a Recharge (type 8) Plan and 2. Is part of a Type 48 (Reservoir or Plan to a T&C Plan or Augmentation Plan) operating rule. When reservoir recharge (seepage) is to be used as an augmentation plan supply the type 48 operating rule requires:
    - The Destination be a T&C Plan (type 1) or a Well Augmentation Plan (type 2)
    - Source 1 be a Recharge Plan (type 8)
- Reservoir recharge (seepage) is reported as a return flow in the standard diversion output (*.xdd) when it enters the stream.
- Reservoir recharge (seepage) is reported as seepage in the standard reservoir output (*.xre).
- Reservoir recharge is reported as a supply and as a use in the standard plan output (*.xpl).
- Reservoir recharge (seepage) loss, if any, is reported as part of the standard water balance output (*.xwb).

7.32 Canal Loss (Seepage) as an Augmentation Supply

StateMod allows the location and timing associated with canal loss (seepage) to be used as an augmentation supply. The following comments are provided to assist in implementing and using this capability:

- Canal loss (seepage) is specified as part of the carrier (type 45) operating rule.
- Canal loss (seepage) may be routed to any number of stream locations using any number of unit response functions.
- Canal loss (seepage) return flow properties must be provided in a plan return flow file (*.prf).
- Canal loss (seepage) can become an augmentation supply if it is 1. Associated with a Recharge (type 8) Plan and 2. Is part of a Plan or Reservoir Reuse to a T&C or Augmentation Plan Direct (Type 48) or by Exchange (Type 49) operating rule. When canal loss (seepage) is to be used as an augmentation plan supply the type 48 or 49 operating rule requires:
    - The Destination be an augmentation plan
    - Source 1 be a recharge plan (type 8)
- If a type 48 or 49 operating rule is not specified then canal seepage returns to the system but is not considered an augmentation (plan) supply.
- Canal loss (seepage) is reported as a supply and as a use in the standard plan output (*.xpl).

7.33 Augmentation Well (Pumping) as an Augmentation Supply

The type 37, Augmentation Well, operating rule provides a method to pump an Augmentation well in order to satisfy a T&C or Augmentation Plan demand. The source is a well water right. The destination is a T&C or Well Augmentation Plan. The following comments are provided to assist in using and interpreting this rule:

- An augmentation well right is typically tied to a unique (augmentation) Well structure. This allows unique return and depletion data associated with the augmentation well to be provided in the well station file (*.wes). This augmentation well structure typically (but is not required to have) a demand equal to zero in the well demand (*.wem) file. Note that return flows associated with an augmentation plan are typically assigned a unit response function that routes water to the stream in the same time step that they occur and for future time steps. Also the augmentation well structure typically has no demand; it is used and controlled by an operating rule.
- The type 37 operating rule requires the second water supply be an "Augmentation plan ID". This allows the augmentation plan requirements associated with the augmentation well pumping to be stored and ultimately satisfied. This plan ID may or may not be the same as the destination plan ID.
- An augmentation well might serve as both a water supply and an augmentation source. This can occur if the same right is assigned to both a standard (irrigation) well structure and an Augmentation well structure. If the administration number assigned in the operating right file is different than the administration number of the source (augmentation) well the operating rule value is used and a warning is printed to the log file. The amount pumped to each demand is limited by the well's total capacity and water right.

7.34 Special Well Augmentation Plans

The Plan or Reservoir to a Plan Direct (type 48) and Plan or Reservoir to a Plan by Exchange (type 49) operating rules provide a method to recognize a physical water supply is sometimes not required to offset a T&C or Augmentation Plan requirement. Examples include pumping in a designated basin or pumping by a well decreed as non tributary. The following comments are provided to assist in using and interpreting this rule:

- The source must be a "Special Augmentation" Plan (type 10) that allows StateMod to recognize a physical water supply is not required because of an administrative decision.
- The destination must be the same "Special Augmentation" Plan (type 10) to allow StateMod to recognize demands that can be offset by an administrative decision.

7.35 Accounting Plan Operations

An accounting plan is a special type of Plan (type 11) that allows water to be temporarily stored and subsequently released for a variety of purposes. Storage within the accounting plan only occurs within the time step when the diversion occurs. Therefore if not used or stored in a reservoir, it must spill. A typical use of an accounting plan would be to temporarily hold a water transfer before it is released to direct diversion, to storage, to offset a T&C Plan requirement, to offset an Augmentation Plan requirement, etc. The following comments are provided to assist in using an accounting plan:

- Water is typically diverted into an accounting plan using a type 24 (Direct Flow Exchange) or type 25 (Direct Flow Bypass) operating rule.
- When water is bypassed to an accounting plan the source structure's capacity is reduced.
- Monthly and annual diversion limits can be imposed when the water is diverted directly to a demand using a type 24 or type 25 operating rule or after it is released from the accounting plan to a demand using a type 27 or type 28 operating rule.
- Water is typically released from an accounting plan using a type 27 (Direct Release from a Plan) or type 28 (Exchange from a Plan) operating rule.
- Because water is only stored in an accounting plan during the time step it diverts, any unused water must be spilled using a type 29 (Plan Spill) operating rule.
- If the terms and conditions associated with each use of water from an accounting plan are the same they may be specified as part of the operating rule used to divert to the plan (e.g. the type 24 or type 25 operating rules).
- If the terms and conditions associated with each use of water from an accounting plan vary, they may be specified as part of the operating rule used to release the water (e.g. the type 27 or type 28 operating rules).
- If the water is spilled from an accounting plan using a type 29 operating rule or released to its original use by a type 27 or 28 operating rule, the user may adjust the monthly and annual diversion limits associated with the initial diversion into the accounting plan. This adjustment is specified when the water is released by the type 27, type 28 or type 29 rules.

7.36 Multiple Ditch Owners

Multiple Ditch owners divert using the same water right and share equally in any water shortages. Unlike a reservoir where multiple accounts are common, multiple owners of a ditch are relatively rare. StateMod provides two methods to simulate multiple ownership. Each approach 1) allows transit losses to be assigned at both the source and when water is released for use and 2) allows Terms and Conditions (T&C Plans) associated with the transfer to be assigned at the source or as water is used by each individual owner.

Method 1 uses the ownership data available to the Type 27 (Release from a Plan Direct) or the Type 28 (Release from a Plan by Exchange). The following are noted: Water is typically diverted into a "shared" accounting plan that is shared by all users using a Direct flow Exchange (type 24) or Direct Flow Bypass (type 25) operating rule.

- From this "shared" accounting plan water can then be released for use based on the ownership percent. The transfer is based on ownership; therefore and supply shortages are shared, based on ownership, by all users.

Method 2 uses the Type 46 Multiple Owner operating rule. The following are noted:

- Water is typically diverted into a "shared" accounting plan that is shared by all users using a Direct Flow Exchange (type 24) or Direct Flow Bypass (type 25) operating rule. The transfer is based on ownership; therefore any supply shortages are shared, based on ownership, by all users.

- From this “shared” accounting plan water can then be transferred to an individual’s accounting plan using a Multiple Owner (type 46) operating rule.
- Method 2 has a minor advantage over method 1 because it allows the amount transferred to each owner to be explicitly reported in the plan report (*.xpl).

7.37 Standard versus Fixed Unit Response (Return Flow) Patterns

A unit response function, or return flow pattern is a method used to estimate how return flows or pumping will interact with a stream over time. A standard unit response function is typically developed using an analytic equation such as Glover or by a ground water model such as Modflow. It is time independent in the sense that it can be applied from the current time step to a specified number of future time steps. For example, assume the Standard Return pattern shown in the following table is assigned to a diversion. As shown it extends over six months. A monthly model that diverts in June will estimate return flows for the current month and 5 months in the future, June through November. The return flows for each month use data provided under the 1st through 6th entries of the unit response function. Standard unit response functions are the norm for most ditches.

Pattern/Month	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**Total**
Standard	20	40	20	10	5	5							100
Fixed	9	9	9	0	0	0	0	21	16	12	13	11	100

A fixed unit response function is typically negotiated from long term average data. They often represent winter return flow obligations associated with an irrigation season use of water rights that have been changed to other uses (e.g. municipal). It estimates a time step’s return based on a fixed monthly return value. Also return flow obligations are set to zero whenever a zero value follows a non-zero value. For example assume the Fixed Return pattern shown in the table is assigned to a diversion. As shown it extends over 12 months. A monthly model that diverts in June (month 6) will estimate return flows from August to December of the year diverted and January through March of the next year using data provided under the 8th – 12th and 1st - 3rd entries. The following comments are provided to assist in modeling standard versus fixed unit response functions:

- Both standard and fixed unit response data are provided in a unit response (*.urm) file. The file has no distinction between a standard and fixed return flow pattern.
- Fixed unit response data are used to calculate delayed return flows for the month of diversion and the following 11 months. Fixed unit response data should never exceed 12 months.
- When a fixed unit response function is used any returns that may be assigned to a month after a zero return flow value follows a non-zero value is set to zero.
- Fixed unit response patterns are currently used to calculate Term and Conditions (T&C Plan) associated with a release from accounting plans using a Plan to User Direct (type 27) or Plan to User by Exchange (type 28). As described under those operating rules, the variable ciopso(2) is used to indicate the T&C plan while the variable iopsou(4,1) is used to indicate the type of return pattern (fixed or standard).

7.38 Reservoir Release Limits

Reservoir release limits provide a method to impose monthly and annual limits for one or more operating rules. They are typically used when the source of the water supply is one or more "standard" storage rights that serve one or more users. This capability has generic applications but was developed for the Colorado River Basin where replacement reservoir releases from Green Mountain Reservoir and its associated exchanges with Williams Fork Reservoir and Wolford Mountain Reservoir are limited to 66,000 af/yr. In order to impose reservoir release limits the following are noted:

- A Plan Data File (*.pln) is provided in the Response File (*.rsp).
- A Release Limit Plan (type 12) is provided in the plan data file (*.pln) and located anywhere in the River Network File (*.rin).
- A Release Limit Operating Rule (type 47) is provided in the Operating Rule File (*.opr). This rule has the source ID set to the Release Limit Plan ID and contains the monthly and annual release limits.
- Reservoir releases are made using data provided in the Operating Rule File (*.opr). Specifically a Direct Reservoir Release Operating Rule (type 27), Exchange Reservoir Release Operating Rule (type 28), or Replacement Reservoir Operating Rule (type 10) may be used to make reservoir releases up to the limits set in the Release Limit Operating Rule (type 47). Note that a Replacement Reservoir Operating Rule (Type 10) does not allow a release to a carrier. Therefore the type 27, 28 and 10 rules are often used together when imposing reservoir release limits.
- The annual limits are reset at the beginning of every simulation year.
- Results associated with the plan operation are summarized in the Plan Output File (*.xpl). This file reports the beginning of the month release limit, each release (use) that is tied to the plan, and the amount released for each use.
- Results associated with each operating rule continue to be reported in the Operating Rule Output File (*.xop) and Reservoir Output File (*.xre).
- Additional information is available in Chapter 4 under the Plan Station description and the Operating Rule descriptions.

7.39 Augmentation Station Modeling

An Augmentation Station, as defined herein, is a structure that carries a diversion, typically with loss, then returns non-lost water to the river for subsequent rediversion. Augmentation stations are commonly used to implement a water transfer with terms and conditions. They can be simulated by StateMod using a type 27 (Plan or Reservoir Use Direct) or type 28 (Plan or Reservoir Use by Exchange) operating rule as follows:

- The number of intervening structures should be set so that at least two carriers will be provided.
- The first carrier should be the Structure ID that diverts water from the stream and has an intervening structure type = Carrier.
- The second carrier should be a station on the river that has an intervening structure type = Return.

- Note that conveyance losses can be specified for a intervening structure type = Carrier but not an intervening structure type = Return. This limitation allows losses to be routed to the system using the return flow properties of the carrier structure.
- If water that returns to the river is subsequently rediverted into another carrier at least three entries should be provided sequentially as follows; 1. An intervening structure with type = Carrier, 2. An intervening structure with type = Return, and 3. An intervening structure with type = Carrier.
- When StateMod detects the intervening structure type = Return it shepherds any water delivered to the river to the destination or another carrier.

7.40 Reuse Modeling

The State Model includes Plan structures that can be used to track (color) water at a wastewater treatment plant, in the river, in storage, and water imported into the river system. This provides the opportunity for users to differentiate between one-time use water and reusable water when making releases from storage or from plans to meet various demands. General discussion of plans in the modeling environment is included in Section 3.9. The following comments are provided to assist in representing reusable supplies in a model network:

- Reusable supplies can be modeled in a transmountain import plan, a non reservoir reuse, a reuse reservoir and an accounting plan using various operating rules. The various reuse plans are provided in the plan data file (*.pln) and located anywhere in the River Network File (*.rin).
- Transmountain Import Plans (type 7) are used to recognize water has been imported from outside the system to a reservoir, direct flow structure or a carrier using an Import to Structure (type 35) operating rule. The imported water may be reused if the variable creuse is set to a reuse plan. In addition, this operating rule can be used to constrain a diversion to the capacity of up to 10 intervening structures or carriers. Note that an import structure should be specified with the same ID in both the diversion station file (*.dds) and plan file (*.pln). Finally monthly import values should be specified as negative demands in the diversion demand file (*.ddm).
- Non Reservoir ReUse Plans (type 4) are typically modeled at wastewater treatment plants. The reusable supplies are generated from pro-rata use of diversion structure's rights by exchange (type 24) or direct (type 25) operating rules. Non Reservoir ReUse Plans can also be generated from releases from accounting plans (type 11) via Plan to User Direct (type 27) or Plan to User by Exchange (type 28) operating rules. The Non Reservoir ReUse represents a supply of reusable water for other uses. Water associated with Non Reservoir ReUse Plans cannot be carried over between time steps. Therefore, use of non reservoir reuse plans must include a Plan Spill rule (type 29) to release any unused water to the river system.
- Reuse reservoirs (type 3) are modeled in conjunction with reservoir accounts. Reuse reservoirs are similar to non reservoir reuse plans except water stored in a reuse reservoir can be carried over between time steps.
- Accounting plans (type 11) with reusable supplies are typically used to temporarily store pro-rata water rights or consumptive use credits diverted off the river system via type 24 or type 25 operating rules. Release of these reusable supplies to other demands (e.g. diversion, reservoir, T&C plan, well augmentation plan) can be represented via Plan to User Direct (type 27) or Plan to User by Exchange (type 28) operating rules.

- Reuse plan ID's (*creuse*) can be assigned in type 24, 25, 27 and 28 operating rules to model reusable supplies.
- Monthly and annual volumetrics (13 total values that do not vary by year) can be specified with use of reusable supplies in type 24, 25, 27 and 28 operating rules.
- Terms and conditions can be specified with use of reusable supplies in type 24, 25, 27 and 28 operating rules.

7.41 Natural Flows with Recharge

As described in Section 7.1, the State Model estimates natural flows at stream gages using the following formula:

Qb = Qg + D - R - S + E - I

Where:

Qb	= Natural flow
Qg	= Gaged flow
D	= Upstream diversions
R	= Upstream return flows
S	= Upstream change in reservoir storage
E	= Upstream reservoir evaporation
I	= Imports

When recharge water is part of historic river operations and is to be included in the natural flow calculations, the exact same formula is used with the following data:

- Diversion records includes water from all sources (priority, exchange, etc.) and for all uses (irrigation, municipal, storage, recharge, etc.). This data is commonly called Total Diversion from Headgated.
- StateMod's Natural Flow module knows the amount of total diversion taken to reservoir storage using a reservoir end-of-month file (*.eom) file. This file that contains reservoir storage data for every reservoir in the system.
- StateMod's Natural Flow module knows the amount of total diversion taken to recharge using a Diversion_To_Recharge (*.dre) file. This file contains total diversions to recharge for every structure that caries water to recharge.
- StateMod's Natural Flow module knows the amount of total diversion taken to irrigate and reservoir releases to irrigated using a Diversion_To_Recharge (*.dre) file. This file contains total diversions to irrigated for every structure that caries water to recharge.
- StateMod's Natural Flow module adjusts the total diversion data for diversions to recharge using a Diversion_To_Recharge (*.dre) file that contains total diversions to recharge for every structure that caries water to recharge.
- StateMod's Natural Flow module adjusts the total diversion data for recharge as a reservoir with seepage. In order to calculate return flows associated with recharge a Reservoir_To_Recharge (*.rre) file must be provided that contains recharge data for every recharge reservoir. This data, along with the reservoir seepage characteristics specified in the

reservoir station (*.res) file and return flow properties specified in the reservoir return file (*.rre) are used to calculate accretions from a recharge site.

- The above calculations can be confirmed by reviewing the Natural Flow Module's Base Flow Estimate File (*.xbi). The following are noted:
  - The column titled Divert is the sum of all upstream diversions included in the historic diversion file (*.ddh). Therefore it includes water from all sources (priority, exchange, etc.) and for all uses (irrigation, municipal, recharge, etc.).
  - The column titled Return includes return flows from consumptive uses as well as recharge.
  - The column titled Divert to Rech echoes the data provided in the Diversion_To_Recharge (*.dre) file.
  - The column titled Reservoir to Rech echoes the data provided in the Reservoir_To_Recharge (*.dre) file.
  - When the historic diversion data are adjusted by the amount diverted to recharge the calculation is not allowed to go negative.
  - Diversion_To_Recharge data are only required for a reservoir with recharge. If data are not provided the diversion to recharge is estimated to be zero. The ID specified in this file should be the same as the Diversion ID to be adjusted.
  - Diversion_To_Recharge data are only required for a reservoir with recharge. If data are not provided the diversion to recharge is estimated to be zero. The ID specified in this file should be the same as the Reservoir ID with recharge.

7.42 Reach Reporting

Selected State Model reports have the capability to summarize results by stream reach including the diversion comparison (*.xdc), the stream comparison (*.xsc) , the reservoir comparison (*.xrc) and the well comparison (*.xwc). In addition a water budget by reach is automatically generated whenever a water budget (*.xwb) is generated. To facilitate reach processing the following are noted:

- As defined herein, a stream reach is simply an aggregation of structures located within a geographic region of the network.
- As described in section 4.53 the preliminary Reach Data file contains two components; Reach Data and Node Data. Reach data is used to define how one stream reach is connected to another. Node data is used to assign a stream (river) node to a stream reach.
- To eliminate the need to build a Reach Data file, a preliminary one (*.xrh) is generated by the check option (-check) for every structure in the system when a river gage (*.rig) file is provided (see Section 4.4.1). If a river gage (*.rig) file is not provided the Check option assignes one to define preliminary stream reaches. If one is not provided no reach data is generated.
- The default name for the preliminary file created by the check option is *.xrh. This preliminary file is commonly revised in an editor to reassign the Reach Data connectivity. In addition sub reaches may be defined to represent structures not bounded by a stream gage. After editing, the Reach Data file is typically renamed to *.rch to avoid it being overwritten every time a new check run is made.

8.0 Frequently Asked Questions

This chapter provides guidance for frequently asked questions regarding the operation of the State of Colorado's Stream Simulation Model (StateMod). The following sections are available in this chapter:

8.1 Model Execution

Following are typical operating commands where the base file name is "*Example1*" and the ID requested is "*10001*":

Operation	**Command**
Base Flow	StateMod Example1 -base
Simulate	StateMod Example1 -simulate
Report for Water Rights	StateMod Example1 -report -xwr
Report Graph output	StateMod Example1 -report -xdg -10001

8.2 Changing Data

Following are typical commands to change data.

Operation:

Change a water right priority or amount.

To Do:

1. Edit direct diversion (*.ddr).

2. Edit reservoir right file (*.rer).

3. Edit instream right file (*.ifr).

4. Edit operational right file (*.opr).

Operation:

Change a structure location.

To Do:

1. Edit direct diversion station (*.dds).

2. Edit reservoir station file (*.res).

3. Edit instream station file (*.ifs).

Operation:

Have baseflow results be used by the simulation module.

To Do:

1. Revise the response file (*.rsp) base stream flow file to be *.xbm, the results of the baseflow module.

Operation:

Maintain the old baseflow results while testing new baseflow data.

To Do:

1. Name the base stream file to anything except *.xbm. The recommended file name is *.rim.

8.3 Adding Data

Following are typical commands associated with adding data.

Operation:

Add a new river location, which uses existing hydrology data.

To Do:

1. Edit river network file (*.rin).

Operation:

Add a new river location with estimated hydrology data.

To Do:

1. Edit the river network file (*.rin).

2. Edit the base flow data file (*.rib).

3. Rerun the baseflow module.

Operation:

Add a new river location with gaged hydrology data.

To Do:

1. Edit the river network file (*.rin).

2. Edit the historic streamflow file (*.rih).

Operation:

Add a new diversion to an existing river location.

To Do:

1. Edit the diversion station file (*.dds).

2. Edit the direct diversion right file (*.ddr).

3. Add to the direct diversion demand file monthly (*.ddm) or annual (*.dda).

8.4 Imports

Following are notes related to the treatment of imports.

Operation:

Account for imports during the baseflow generation and use the same diversion station file during simulation.

Approach:

Treat the import like any other diversion. Indicate imports as a negative diversion.

To Do:

<u>Direct Diversion Station (*.dds) file</u>

1. Include an entry in the diversion station file (*.dds) that represents the importing structure's location on the stream system.

<u>Historic Diversion (*.ddh) file</u>

2. Include a negative diversion (import) in the historic diversion file (*.ddh) for the import structure

<u>Direct Diversion Demand (*.ddm) file</u>

3. Include a 0 demand for the import structure.

Note:

You'll see a warning in the *.log that you have no water rights for this structure and a negative diversion (import) for this structure. These warnings are consistent with what you are doing.

You'll see data in the import column of the base flow result information file (*.xbi) that shows how imports were included in the base flow calculations.

By including a 0 demand for this structure in the diversion demand file (*.ddm), the same diversion structure file (*.dds) can be used for base flows and simulation.

Operation:

Tie a direct flow import to a structure during simulation.

Approach:

Operate the structure receiving imported water via an operating rule by:

To Do:

1. Including an entry in the diversion station file (*.dds) that represents the importing structures location on the source stream.

2. Including the imported structures water rights in the direct diversion water right file (*.ddr).

3. Including a type 11 entry in the operating right file (*.opr) which ties a demand to the water right of the structure that imports water. The source will be the water right ID, the destination will be the receiving structure's ID, and the admin # will typically be just junior to the receiving structure's water right.

Note:

See Example 10 for a simple import example for both simulation and baseflow generation.

8.5 Abnormal Model Termination

Following are notes related to abnormal model termination.

Operation:

Model abnormally terminates with some kind of message related to an input file.

To Do:

1. Check the *.log file. It will contain various notes on which files were expected to be read and which files were actually read from the *.rsp file. Chances are your input data error is located in the last file read. Double check that input file with the format described in the documentation.

8.6 Implementation of the Blue River Decree (Upstream Storage)

Following are notes related to implementing the Blue River Decree for the Upper Colorado River Model application.

Operation: Model the Blue River Decree at Dillon Reservoir.

Discussion:

This discussion is a brief summary of the Blue River Decree to provide background information for its operation in StateMod. For a complete discussion of the decree see W.W. Wheeler (1986). In brief, the Blue River Decree allows Dillon Reservoir, Roberts Tunnel, Upper Blue Reservoir and Con Hoosier Tunnel to store or divert out of priority with respect to Green Mountain's first fill decree. The water diverted out of priority to storage or a direct diversion is stored in an Out-of-Priority (OOP) Plan. If the OOP diversion is to a reservoir it is typically kept in a separate account which may not be used until booked over into one of the reservoirs other accounts. Operational rights are used to offset the Out-of-priority Plan requirements if Green Mountain does not fill at a user specified date.

To Do:

<u>Reservoir Water Right (*.rer) file:</u>

1. Add an Out-of-Priority Plan for each Out-of-Priority Storage or diversion.

2. Add a special Out-of-Priority (OOP) account to each reservoir storing out of priority (i.e. Dillon Reservoir and Upper Blue Reservoir). Note this account should not be tied to any users of the reservoir.

<u>Operating Right (*.opr) file:</u>

3. Add a type 34 Out-of-Priority Storage or Diversion operating rule.

4. Add a type 8, Out-of-Priority bookover, operational right with the administration number to be just junior to Green Mountain's first decree.

8.7 Add Daily Capability to a Monthly Model

Following are notes related to adding daily capability to a monthly model. Note that daily baseflow generation is not required. Therefore two operations are described herein. Also for daily baseflow generation, the same daily ID data provided in the station files data is used for demands and historic data.

Operation:

Add daily capability to a monthly model without generating daily baseflows.

To Do:

<u>Response (*.rsp) file (see Section 4.1).</u>

1. Add file names for daily streamflows (*.rid), direct diversion demand (*.ddd), instream flow demands (*.ifd), well demand (*.wed), reservoir targets (*.tad) and delay tables (*.dld).

<u>Control (*.ctl) file (see Section 4.2).</u>

1. Ensure all the optional data is included at the bottom of the file (see Section 4.2).

2. Change the daily option (iday) to 1 to indicate a daily model.

River Station (*.ris) file (see Section 4.4).

1. Add variable *crunidy* to indicate the river station ID to use for daily data.

Direct Diversion Station (*.dds) file (see Section 4.5).

1. Add variable *cdividy* to indicate the diversion station ID to use for daily data.

Instream Flow Station (*.ifs) file (see Section 4.7).

1. Add variable *cifridy* to indicate the instream flow station ID to use for daily data.

Well Station (*.wes) file (see Section 4.8).

1. Add variable *cdividyw* to indicate the well station ID to use for daily data. Note this file is only required if wells are simulated.

Reservoir Station (*.res) file (see Section 4.5).

1. Add variable *cresidy* to indicate the reservoir station ID to use for daily data.

Build the following daily files:

1. Direct diversion demand (*.ddd) file.

2. Daily instream demand (*.ifd) file.

3. Daily well demand (*.wed) file (if wells are simulated).

4. Daily reservoir target (*.tad) file.

5. Daily return file (*.dld) file.

6. Daily Consumptive Requirement (*.ddx) file (if variable efficiency is simulated).

Operation:

Add daily capability to a monthly model including the generation of daily baseflows.

To Do:

All of the above plus:

Response (*.rsp) file (see Section 4.1).

1. Add file names for daily historic streamflow (*.rhy), daily historic diversions (*.dhy), daily historic pumping (*.why) and daily reservoir contents (*.eoy).

Build the following historic daily files:

1. Historic daily streamflow (*.riy) file.

2. Historic daily diversion (*.ddy) file.

3. Historic well pumping file (*.why) file.

4. Historic daily reservoir end of content (*.eoy) file.

Note the same daily ID data provided in the station files data is used for both and historic daily data.

8.8 Add Wells to an Existing Model

Following are notes related to adding wells to an existing model.

Operation:

Add wells to an existing model.

To Do:

Response (*.rsp) file

1. Add an entry for a well station file (*.wes).
2. Add an entry for a well right file (*.wer).
3. Add an entry for a well demand file (*.wed).
4. Add an entry for an historic well pumping file (*.why).

Control (*.ctl) file

1. Add variable iwell equal to 1.

Delay (*.dly) file

1. Add delay table(s) that represent the impact of well pumping on the river.

Build the following files:

1. Well Station File (*.wes).
2. Well Right File (*.wer).
3. Well Demand file (*.wed).
4. Historic Well Pumping File (*.why).

8.9 How to Implement a Futile Call

A futile call, as implemented in StateMod, allows a tributary stream to operate independently of the mainstem. Therefore, the impact of upstream diversions and return flows are not passed downstream of the futile call locations.

Operation:

Implement a futile call.

To Do:

River Network (*.rin) file

1. Add a river node downstream of where a futile call occurs and
2. Ensure the downstream location (cstadn () of the river network file is blank).

For example:

The following river network where river node Riv_10 flows to Riv_20, which flows to Riv_50, which flows to Riv_60

Station ID	Downstream Station ID
Riv_10	Riv_20
Riv_ 20	Riv_50
Riv_50	Riv_60

Would look like the following if a futile call is added downstream of Riv_20

Riv_10	Riv_20
Riv_ 20	Futile
Futile	
Riv_50	Riv_60

8.10 How to Estimate Baseflows at Ungaged Locations when Gaged Locations are Natural Flows

The State Model allows baseflows to be estimated at ungaged locations when the streamflows provided at gaged locations are natural flows. This operation is typically used when the user has filled missing data by regressing natural flows rather than regressing using gaged data.

Operation:

Estimate baseflows at ungaged locations when the streamflows provided at a gaged locations are natural flows.

To Do:

Response (*.rsp) file

Set the historic stream flow file (*.rih) to the file name that contains the natural flows at gaged location.

Baseflow Operation

Execute the model using the special baseflow option by entering -basex or -baseflowx.

Simulate Operation

See the first comment below.

Comments:

When the above procedure is used to generate natural flows at ungaged locations, during simulation the user will probably want the response file to contain historic stream flows rather than the estimate of natural flows at gaged locations. This will ensure model output that compares estimated streamflows to gaged streamflows is correct.

The above procedure could be reproduced using the typical baseflow option (-base or -baseflow) if no diversions and reservoir end of month content data are provided. The -basex or -baseflowx option was added to simplify data preparation.

8.11 How to Limit the Total Diversion by a Carrier to an Annual Volume

The State Model allows a carrier to be limited to an annual diversion volume.

Operation:

Limit a carrier's diversion to an annual volume.

To Do:

Operating Right (*.opr) file

1. If the carrier structure does not already exist, add one to the river network (*.rin), the diversion station file (*.dds), the diversion right file (*.ddr) and the diversion demand file (*.ddm). Note, since the objective is to limit the demand to an annual total, the values entered into the diversion demand file (*.ddm) are not used in any calculations but are printed to the structure output (*.xdd) to compare demands to actual diversions.

2. Add a type 14 operating rule (Carrier with a constrained demand) where the destination structure is, for example, a reservoir, the destination structure's account is the reservoir's account, the source structure is the carrier's water right and the source account (iopsou(2,1)) is the annual diversion limit in acft.

Comments:

The type 14 operating right is limited by the annual volume, carrier capacity and destination capacity. It is not constrained by the diverting water right.

8.12 How to Implement the Rio Grande Compact

The State Model allows the Rio Grande Compact to be simulated as an operating rule with the following features:

Compact demands are entered as forecasted data in the monthly Instream flow demand file (*.ifm). Note, a negative number indicates the demand data is a forecast value.

Compact data is entered as an operating rule (type 17 for the Rio Grande and type 18 for the Conejos).

For the Rio Grande River's portion: 1. The destination must be an Instream flow (e.g. an Instream flow right just below the Rio Grande at Labatos gage), 2. Source 1 must be a stream gage that represents the index flow (e.g. Rio Grande at Del Norte), and Source 2 must be a stream gage used to adjust to the discharge at the Instream flow location (e.g. the combined discharge of the Conejos River near La Sauses).

For the Conejos River's portion: 1. The destination must be an Instream flow (e.g. an Instream flow right just below the combined discharge of the Conejos River near La Sauses), 2. Source 1 must be a stream gage (e.g. Conejos River near Magote), 3. Source 2 must be a stream gage (e.g. Los Pinos River near Ortiz), and 4. Source 3 must be a stream gage (e.g. San Antonio River at Ortiz).

Operation:

Implement the Rio Grande Compact for both the Rio Grande and Conejos Rivers.

To Do:

Response (*.rsp) file

1. Add a monthly Instream flow demand (*.ifm) file after the annual Instream flow demand (*.ifa). Note for StateMod to be backward compatible, this file is only read when the variable *iifcom* of the Instream flow station (*.ifs) file indicates monthly data is provided.

Control (*.ctl) file

1. Confirm the variable *ffacto* used to adjust Instream flow data is consistent with the data provided in the both annual Instream flow demand (*.ifa) and monthly Instream flow demand (*.ifm) file.

River Network (*.rin) file

1. Add an Instream flow just demand node downstream of the Rio Grande at Labatos and the Conejos River near La Sauses.

Instream Flow Station (*.ifs) file

1. Add two Instream flow demands to represent the Rio Grande at Labatos and the Conejos River near La Sauses. Set the variable *iifcom* to 1 to indicate monthly data is provided.

Monthly Instream Flow Demand (*.ifm) file

1. Add two monthly Instream flow forecasts for each year and month as negative numbers. One should represent the April to September forecast for the Rio Grande River Index Station (Rio Grande near Del Norte). The second should represent the April to September forecast for the sum of the Conejos River Index stations (Conejos River near Magote, Los Pinos river near Ortiz and the San Antonio river near Ortiz). Note a zero should be entered for months without a forecast.

Operating Right (*.opr) file

1. Add an operating right for the Rio Grande River's portion of the compact as a type 17 right. Set the destination to the Instream flow located below the Rio Grande at Labatos gage. Set source 1 to the stream gage that represents the index flow (e.g. Rio Grande at Del Norte) with a coefficient (account) of 1.0. Set source 2 to the stream gage used to adjust to the discharge at the Instream flow location (e.g. the combined discharge of the Conejos River near La Sauses) with a coefficient (account) of -1.0.

2. Add an operating right for the Conejos River's portion the compact as a type 18 right. Set the destination to the Instream flow located below the combined discharge of the Conejos River near La Sauses. Set source 1 to the first index stream gage (e.g. Conejos River near Magote) with a coefficient (account) of 1.0. Set source 2 to the second index stream gage (e.g. Los Pinos River

near Ortiz) with a coefficient of 1.0. Set source 3 to the third index stream gage (e.g. San Antonio River at Ortiz) with a coefficient of 1.0. Note to implement the Rio Grande Compact, a third source of data has been added to the right hand side of the operating right file.

8.13 How to Implement Variable Efficiency

The State Model allows efficiency to vary from zero to a user specified maximum value. Note that when the Variable Efficiency approach is used the efficiency data provided in the diversion station (*.dds) file and well station (*.wes) file are replaced with the efficiency data provided in the annual times series file (*.ipy). See Section 7 for additional discussion of how this capability was implemented using the Modified Direct Solution Algorithm.

Operation:

Implement variable efficiency capability into StateMod.

To Do:

Control (*.ctl) file

1. Set the variable efficiency switch (*ieffmax*) to 1.

2. Set the annual time series file switch (*itsfile*) to 1 or 10. As described in the control file documentation, an entry of 1 implements the variable efficiency capability using the product of conveyance and flood irrigation efficiency for diversions and flood irrigation for wells. This data is provided in an annual time series file (see below). An entry of 10 allows sprinkler efficiency to be used on lands with sprinklers, pumping to be limited to acres with ground water, annual pumping volume (capacity) limits, and a ground operating model. These terms are discussed later in this chapter.

Response (*.rsp) file

1. Add an annual time series file (*.ipy) after the reservoir target file (*.tar). Note for StateMod to be backward compatible, this file is only read when the Control file variable *ieffmax = 1.* Add a monthly Irrigation Water Requirement file (*.iwr) after the annual time series file (*.ipy). Note for StateMod to be backward compatible, this file is only read when the Control file variable *ieffmax = 1.* Note this file is formatted to be exactly the same as the monthly irrigation water requirement file (*.ddc) generated as an output by StateCU.

Annual Time Series (*.ipy) file

1. Build an annual time series (*.ipy) file for every structure served by a diversion or wells only (enter 1 value for lands served by both surface and ground water under the ID of the surface water structure). Note this file is formatted to be exactly the same as the annual time series file prepared as input to StateCU.

Irrigation Water Requirement (*.iwr) file

1. Build a monthly irrigation water requirement (*.iwr) file for every structure served by a diversion or wells only (enter 1 value for lands served by both surface and ground water under the ID of the surface water structure). Note this file is formatted to be exactly the same as the irrigation water requirement (*.ddc) file generated by StateCU.

8.14 How to Implement the Maximum or Mutual Supply Approaches to SW and GW Use

The State Model allows the user to operate using a Maximum or Mutual water supply approach. Both require time series data (*.ipy) be provided that contains ground water acreage, sprinkler acreage, efficiency data and water use approach switch. Also both operate from senior to junior using water right data provided. For the Maximum Supply approach an operating rule allows the water right priority of wells associated with lands served by sprinklers to be made senior in order to apply water to lands served by sprinklers before any other source. For the Mutual supply approach there is no operating rule required and wells operate according to the priority provided in the well water right file.

Note that for the maximum supply option to be effectively implemented the annual time series file (*.ipy) needs to contain non zero value for acres served by ground water and acres served by sprinkler.

Operation:

Implement Maximum Supply capability into StateMod.

To Do:

This activity requires the variable efficiency capability be operational. Therefore in addition to the data described in Section 8.12, the following are required:

<u>Control (*.ctl) file</u>

1. Set the sprinkler switch (*isprink*) to 1.

<u>Annual Time Series (*.ipy) file</u>

1. Set the water use approach variable (*gwmode*) in the annual time series (*.ipy) file to 1 to indicate the maximum supply option.

2. If appropriate, insure the acres served by sprinkler are not zero. (If the acres served by sprinklers are zero then sprinklers cannot be operated at a senior priority.)

<u>Operational Right (*.opr) file</u>

1. Build a Type 21 operating right where the administration date reflects a senior value that will cause wells with sprinklers to operate first.

Operation:

Implement Mutual Supply capability into StateMod.

To Do:

This activity requires the variable efficiency capability be operational. Therefore in addition to the data described in Section 8.12, the following are required:

Control (*.ctl) file

1. Set the sprinkler switch (*isprink*) to 1.

Annual Time Series (*.ipy) file

1. Set the water use variable (*gwmode*) in the annual time series (*.ipy) file to 2 to indicate the mutual supply option.

8.15 How to Implement Soil Moisture Accounting

The State Model has the ability to include soil moisture as water supply. This feature requires the variable efficiency option be used. It allows water to be stored in the soil zone up to its capacity and the diverting structures (direct diversion or well) efficiency. It uses an operating rule to specify an administration date that controls when water is available to be taken out of the soil zone to satisfy a consumptive (not total) demand. StateMod initializes the soil moisture reservoir contents to be 50% of the soil moisture capacity.

Operation:

Implement soil moisture capability into StateMod.

To Do:

Control (*.ctl) file

1. Set the soil moisture switch (*soild*) to a number greater than 0 that represents a typical soil zone depth in feet (e.g. 3.0 feet).

2. Set the annual time series file switch (*itsfile*) to 10. As described in the control file documentation, an entry of 10 allows variable efficiency and other more complex water use data to be used.

Response (*.rsp) file

1. Add a soil parameter file (*.par) after the annual time series file (*.ipy). Note for StateMod to be backward compatible, this file is only read when the Control file variable *soild > 0.* Note this file is formatted to be exactly the same as the soil parameter file (*.par) used by the consumptive use model, StateCU.

Soil Parameter (*.par) file

1. Build a soil parameter (*.par) file for every structure served by a diversion or wells only (enter 1 value for lands served by both surface and ground water under the ID of the surface water structure). Note this file is formatted to be exactly the same as the soil parameter file used by the consumptive use model, StateCU.

Operational Right (*.opr) file

1. Add a type 22 operating right that provides the administration number that controls when water is available to be taken out of the soil zone to satisfy a consumptive (not total) demand.

8.16 How to Implement Plans

The State Model has the ability to track supplies and demands resulting from other simulated diversions as plans. A general discussion regarding plans is included in Section 7.23, Section 4.39 and other Sections referenced in parentheses above. The general approach to include plans in a model is discussed below.

Operation:

Include plan structure to model.

To Do:

1. Determine what type of plan structure is needed (see Section 3.9),
2. Ensure the response (*.rsp) file has a plan data file provided.
3. Add a Plan ID, etc. to the plan station (*.pln) data file.
4. For Well Augmentation Plans, assign well ID's to Plan ID's in the well plan (*.plw) data file.
5. Add operating rule(s) that include the plan as a destination or source to simulate plan supplies or demands:
    a. Well augmentation plans (see Section 8.20)
    b. Recharge plans (see Section 8.21)
    c. Import plans (see Section 8.17).
    d. Reuse plans (see Section 8.18).
    e. Terms and conditions (T&C) plans – Specify a T&C Plan ID as source 2 (ciopso(2)) in a Direct Flow Exchange (type 24), Direct Flow Bypass (type 25), Plan to a Structure by Exchange (type 27) or Plan to a Structure Direct (type 28) operating rule (see Sections 4.13.24, 4.13.25, 4.13.27 and 4.13.28).
    f. Out-of-Priority Diversion or Storage – Specify an Out-of-Priority Plan ID as the Associated Plan Data in an Out-of-Priority Diversion with Plan operating rule (see Section 4.13.38).

g. Special Augmentation Plan (See Section 8.22)

h. Accounting Plan (see Section 8.18).

i. Release Limit Plan – Specify a Release Limit Plan ID as the source of a type 47 Accounting Plan Limit operating rule (see Section 4.13.47).

6. Review results printed to the plan (*.xpl) output file.

8.17 How to Reuse Transmountain Return Flows

The State Model has the ability to reuse transmountain imports by allowing the return flows to be tracked as part of a "Reuse Plan".

Operation:

Tie transmountain return flows to a reuse plan.

To Do:

1. Ensure the response (*.rsp) file has a plan data file provided.

2. Add a "ReUse Plan" ID, etc. to the plan (*.pln) data file.

3. Set the return flow location for the transmountain water's first user to the Reuse Plan ID in the diversion station (*.dds) file.

4. Add operating rules that allow the reused water to be used by specifying a Plan to a Structure by Exchange (type 27), Plan to a Structure Direct (type 28), and/or a Plan Spill (type 29) operating rule (*.opr).

5. Review results printed to the plan (*.xpl) output file.

8.18 How to Reuse Consumptive Use Credits

The StateMod Model has the ability to reuse consumptive use credits by allowing return flows to be routed to a "Reuse Plan" ID. Note that consumptive use credits are always associated with a Direct Flow Exchange (type 24) or Direct Flow Bypass (type 25) operating rule.

Operation:

Reuse Consumptive use credits.

To Do:

1. Ensure the response (*.rsp) file has a plan data file provided.

2. Add a "ReUse Plan" ID, etc. to the plan (*.pln) data file.

3. For a single use of pro-rata water rights, specify a ReUse Plan ID as the Associated Plan Data in a Direct Flow Exchange (type 24) or Direct Flow Bypass (type 25) operating rule to store, or account for in the river, respectively, a Reservoir or Non Reservoir Reuse Plan (see Section 3.9).

4. For multiple uses of pro-rata water rights, specify an Accounting Plan ID as the Destination in a Direct Flow Exchange (type 24) or Direct Flow Bypass (type 25) operating rule. Specify the Accounting Plan ID as a source in a Plan to a Structure by Exchange (type 27) or Plan to a Structure Direct (type 28) operating rule. To further account for reusable supplies from the returns from the type 27 or type 28 rules, specify a ReUse Plan ID as the Associated Plan Data in the type 27 or type 28 rules.

5. Reusable supplies stored in Non Reservoir ReUse Plans and Accounting Plans cannot be carried over subsequent time steps. Therefore, specify the plan as a source in a Plan Spill operating rule (type 29) with a very junior priority (e.g. 99999.00000)

6. Review results printed to the plan (*.xpl) output file.

8.19 How to Implement Checks for Model Operations and Calibration Issues

Following are typical example checks to identify problems with model operations.

Situation:

Negative baseflows occurring at stream gages or base flow nodes in model network. Simulated baseflows at stream gages not meeting historical stream gage recorded flows.

To Do:

1. Review *.log file from –Base Flow module for the *Negative Flows* summary. Identify extent of negative baseflows by the number of months ('Count' column) and magnitude of negative baseflows ('Est' column). Review monthly distribution of negative baseflows for the stream gage ID or base flow node ID in the base flow information (*.xbi) file.

2. For stream gages, review the data used to calculate baseflows (diversions, return flows, reservoir contents – see Section 7.1). For base flow nodes, review the base flow coefficients and proration factors (see Section 7.2).

3. Review the base flow information (*.xbi) file for months with negative baseflows to determine which of the data used to calculate baseflows is causing the calculation to go negative. This is typically due to simulated return flows greater than historical gaged flows + upstream diversions or data filling techniques; particularly with regard to reservoir contents.

4. Review return flows above gage based on topography and acreage location because return flow are subtracted from gage data. Specifically investigate return flows to neighboring tributaries or other locations that bypass a gage. Mis-location of Return Flow ID's (crtnid), Return Flow Percentages (pcttot), and Return Flow Locations (irtndl) can have a significant impact on calculated baseflows.

5. The gain approach to estimating baseflows in between stream gages requires a coefficient be provided to distribute the gain or loss. This coefficient can be any value the user feels is justified but is typically the incremental area and precipitation below an upstream gage (see Section 7.2).

When the coefficient is the incremental area and precipitation, the data that represents entire drainage area or average precipitation above the baseflow point should be modified to represent only the incremental increase in drainage area and incremental change in average precipitation (usually lower) within the incremental area.

6. The gain approach assigns the distribution of gains for main stem gages to tributary gages. This may not be an adequate representation in which case, the neighboring gage should be used (see Section 7.2).

7. Review other typical causes for negative baseflows, including filled reservoir contents data (*.eom), problems with physical representation of the basin, etc.

Situation:

Diversion demand not being fully satisfied.

To Do:

1. Ensure capacity in diversion structure (*.dds) file is sufficient to meet demand (see 3. below).

2. Ensure structure has sufficient water rights (*.ddr) to meet demand (see 3. below).

3. Review check output (*.chk) file for the following warning: *Demcons; Warning the following structure has a demand that is limited by water rights or capacity.*

4. Ensure sufficient physical flow available to structure by reviewing the River Inflow (Column 25) of the direct diversion summary output (*.xdd) file.

5. Ensure sufficient legally available flow to structure by reviewing the Avail Flow (Column 29) and Control Location (Column 30) of the direct diversion summary output (*.xdd) file.

Situation:

Diversion demand not being fully satisfied with supplemental storage supplies.

To Do:

All of the above plus:

1. Ensure reservoir account(s) specified as source(s) in the reservoir release operating rule (*.opr) has water in storage available for release in the reservoir summary file (*.xre).

2. Ensure reservoir release to meet demand (beginning storage – release to demand) will not cause the reservoir contents to be below the reservoir's Dead Pool (*DeadSt*) assigned in reservoir structure (*.res) file.

3. Review reservoir output (*.xre) file for supplies, releases, and limit to reservoir operations.

4. Ensure River Inflow to reservoir (River Inflow (+) column in *.xre file) is not equal to, or greater than, reservoir maximum release rate (*FloMax*) assigned in reservoir structure (*.res) file.

Situation:

Reservoir unable to fill to capacity.

To Do:

1. Ensure structure has sufficient water rights (*.rer) to meet target.
2. Review reservoir target contents (*.tar) file for monthly target equal to reservoir capacity in reservoir structure (*.res) file.
3. Ensure sufficient physical flow available to structure. Review River Inflow (Column 25) of direct diversion summary output (*.xdd) file.
4. Ensure the water right is assigned to all owners.
5. Ensure sufficient legally available flow to structure. Review Avail Flow (Column 29) and Control Location (Column 30) of direct diversion summary output (*.xdd) file.

Situation:

Accounting Plan not storing water associated with pro-rata water right operating rules.

To Do:

1. Ensure the Accounting Plan ID turned ON in plan structure (*.pln) file.
2. Ensure the Accounting Plan ID specified as destination (*ciopde*) in Direct Flow Exchange (type 24) or Direct Flow Bypass (type 25) operating rule.
3. Ensure the source water right ID specified in operating rule (*ciopso(1)*) is ON in direct diversion right (*.ddr) file.
4. Ensure the percentage of source water right specified in operating rule (iopsou(2)) is greater than zero.
5. Ensure sufficient physical flow available to source structure. Review River Inflow (Column 25) of direct diversion summary output (*.xdd) file.
6. Ensure sufficient legally available flow to source structure. Review Avail Flow (Column 29) and Control Location (Column 30) of direct diversion summary output (*.xdd) file.
7. Ensure the operating right is turned on in the month under review.

8. Ensure monthly and annual maximum limits specified in operating rule (*OprMax(1-13)*) are not restricting simulated diversion to Accounting Plan.

8.20 How to Implement a Well Augmentation Plan

A well augmentation plan is, typically, the result of an engineering analysis that allows a well to divert out-of-priority and replace the river depletions associated with that pumping with one too many replacement water sources in order to avoid injury to senior water rights. The StateMod Model has the ability to track the location(s) and timing of lagged river depletions associated with pumping a well out-of-priority and providing multiple sources to meet out of priority depletions.

Operation:

Simulate a Well Augmentation Plan

To Do:

1. Add an “Augmentation Plan” ID, etc. to the plan (*.pln) data file.

2. Add a Well Augmentation Plan Data file (*.plw) that ties well pumping to an augmentation plan.

3. Add an Out-of-Priority (type 38) operating rule that allows depletions from pumping in a prior time step to be met by an in-priority supply.

4. Add any one of the following operating rules that have the Well Augmentation Plan as a destination:

    a. A Direct Flow Exchange (type 24)

    b. A Direct Flow Bypass (type 25)

    c. A Plan or Reservoir Use Direct (type 27)

    d. A Plan or Reservoir Use – Exchange (type 28)

    e. A Plan or Reservoir Reuse to a Plan Direct (type 48)

    f. A Plan or Reservoir Reuse to a Plan – Exchange (type 49)

5. Review results printed to the plan (*.xpl) output file.

8.21 How to Implement a Recharge Plan

A recharge plan is, typically, part of an engineering analysis that allows out-of-priority pumping or terms and conditions associated with a water transfer to be met by a recharge source. The StateMod Model treats a recharge as a reservoir that recharges (seeps) water. StateMod has the ability to track the location(s) and timing of lagged river accretions associated with the recharged water in a recharge plan and operate those water supplies to meet a demand.

Operation:

Simulate a Recharge Plan

To Do:

1. Add a “Recharge Plan” ID, etc. to the plan (*.pln) data file.

2. Add a “Recharge Site” ID, etc. to the reservoir station (*.res) data file.

3. Add associated reservoir data to the reservoir target (*.tam), historic end-of-month (*.eom), and reservoir right (*.rer) files. The reservoir target is typically set to the recharge site capacity. The historic end-of-month value is typically set to zero. The recharge site may or may not have an entry in the reservoir right (*.rer) file. It will have an entry if the structure is filled under a recharge storage decree. It will not have an entry if the structure is filled under a carrier decree. In this latter case, a recharge diversion right will be assigned to a river headgate (*.ddr)

4. If the recharge reservoir is filled by a carrier, add a Carrier with Loss (type 45) operating rule that has the recharge reservoir as the destination.

5. Add any one of the following operating rules that have the Recharge Plan as a source (water supply):

    a. A Plan or Reservoir Use Direct (type 27)

    b. A Plan or Reservoir Use – Exchange (type 28)

    c. A Plan or Reservoir Reuse to a Plan Direct (type 48)

    d. A Plan or Reservoir Reuse to a Plan – Exchange (type 49)

6. Review results printed to the plan (*.xpl) output file.

8.22 How to Implement a Special Augmentation Plan

A special augmentation plan is a plan that is used to track the volume of water associated with a specific administrative action. Examples include well pumping from a designated basin, well pumping that is decreed to be non-tributary, etc. StateMod has the ability to track the activities associated with these administrative actions, even though they, typically, do not result in any demand or need for augmentation.

Operation:

Simulate a Special Augmentation Plan

To Do:

1. Add a "Special Augmentation Plan" ID, etc. to the plan (*.pln) data file.

2. Add a Well Augmentation Plan Data file (*.plw) that ties well pumping a special augmentation plan.

3. Review results printed to the plan (*.xpl) output file.

9.0 Supporting Utilities

This section describes supporting utilities which operate outside the State Model to provide additional plotting and linking capabilities. The following sections are available within this chapter:

- 9.1 Big Picture Plot
- 9.2 Basin Linkage
- 9.3 StateMod File Comparison
- 9.4 StateDMI
- 9.5 TSTool DMI
- 9.6 StateCU
- 9.7 SmNewRsp (StateMod Response File Program)
- 9.8 SmDelay (StateMod Delay File Program)

9.1 Big Picture Plot

Description

The Big Picture Plot is generated by a FORTRAN program named **delplt.f**. **Delplt** post processes one or more output files from StateMod to generate a file which may be viewed as a table or provided to a plotting program to generate a 'Big Picture Plot'. Output from **Delplt** is always directed to the directory where the response file is located. It has the following capabilities:

- Single, Multiple, Difference, Diffx or Merge file results.

  The Single option will process the first file only.

  The Multiple option will generate a matrix by ID for up to 5 files.

  The Difference option will subtract data from two files (ID's in one file but not another will be treated as zeros).

  The Diffx option will subtract data from two files (ID's in one file but not another will be ignored).

  The Merge option will concatenate two or more files together.

- Operates on both StateMod ASCII and Binary output files.

  For ASCII diversion = *.xdd, reservoir = *.xre

For Binary diversion - *.b43, reservoir = *.b44

- Provides data for one of 20+/- parameters.
- Prints 1, n, or all ID's.
- Prints a specific year, year and month, or average.
- For the Difference option only allows ID's found in one file not in another.

Constraint:

For the ID Option, the code checks for a -999 as an indicator that no more ID's will be provided.

Options

The program is written in FORTRAN. It expects a command file which, if not provided, defaults to 'delplt.in'. Following is the format of a command files:

```
Line 1: Run type (Single, Multiple, Difference,
    Merge or Help)
Line 2: File Name (can be ASCII (e.g. *.xdd) or Binary (e.g. *.b43))
Line 3: Data Type
    Available data types are
       Diversion
       StreamGage (baseflows)
       Stream (same as StreamGage)
       Reservoir
       Instream
       StreamID (baseflows that begin with a USGS Identifier (e.g. 09… or 08…)
Line 3: Parameter
    Available Diversion or streamGage or streamID parameters:
       Total_Demand
       CU_Demand
       From_River_by_Priority
       From_River_by_Storage
       From_River_by_Exchange
       From_Well
       From_Carrier_by_Priority
       From_Carrier_by_Storage
       Carried_Water
       From_Soil
       Total_Supply
       Total_Short
       CU_Short
       Consumptive_Use
       To_Soil
       Total_Return
       Loss
       Upstream_Inflow
       Reach_Gain
       Return_Flow
       Well_Depletion
       To/From_GW_Storage
       River_Inflow
       River_Divert
       River_by_Well
```

```
    River_Outflow
    Available_Flow

  Available reservoir parameters:
    Initial_Storage
    River_Priority
    River_Storage
    River_Exchange
    Carrier_Priority
    Carrier_Storage
    Total_Supply
    Storage_Use
    Storage_Exchange
    Carrier_Use
    Total_Release
    Evap
    Seep_Spill
    SimEOM
    Target_Limit
    Fill_Limit
    River_Inflow
    Total_Release
    Total_Supply
    River_By_Well
    River_Outflow

Line 4: Station ID (0=all, end with a -999)
Line 5: Time (year, year and month, Ave)
```

Example of a Difference Application

```
#
# Multiple Files, same data type, same parameter,
#   three years (1975, 1976 and average)
#
#       Run Type: (Single, Multiple, Difference, Merge or Help):
#
Difference
########################################
#
#       File:
gunnH.xdd
#
#       Data Type (Diversion, StreamGage, Reservoir, Instream, or
StreamID)
Diversion
#
#       Parameter (same as SMGUI) or type -help
Total_Supply
#
#       ID (0=all, n=ID, end with a -999)
0
-999
#
#       Year or Ave (e.g. Ave or 1989 NOV)
Ave
#
########################################
#
#
```

```
#       File:
gunnC.b43
#
#       Data Type (Diversion, StreamGage, Reservoir, Instream, or
StreamID)
Diversion
#
#       Parameter (same as SMGUI) or type -help
Total_Supply
#
#       ID (0=all, n=ID, end with a -999)
0
-999
#
#       Year or Ave (e.g. Ave or 1989 NOV)
Ave
#
-999
```

9.2 Basin Linkage

Description

The Basin Linkage utility, SmLink, allows the input from one or more StateMod input files to be combined in order to operate as a single model. Smlink does the following:

- Reads 2 to 5 StateMod response (*.rsp) files to generate all the input files required to operate StateMod as a linked basin.
- Allows the user to input replacement commands required to delete nodes where the models overlap or add nodes required to facilitate linkage.
- Generates a log file that records the required dimensions for the StateMod Model and any duplicate ID's that need to be revised before a successful execution of StateMod can be performed.

Constraints used by the model include:

To link the *.rin file the code searches for a river node named 'End' or 'END'.

The code warns the user if duplicate ID's are provided in the log file.

The path of each input file is taken from the path specified in the command files unless a path is provided in the response (*.rsp) file.

The information in the control (*.ctl) files must be exactly the same (unit conversions, beginning year, etc.) to avoid any warnings. If inconsistent data is provided the information in the first file read is used for the linked control (*.ctl) file.

Because it is common for several StateMod input files to use the same evaporation, precipitation and delay files the user can specify input data that controls whether or not these files should to be linked.

Because it is common for several StateMod input files to use the StateCU input and output files that span an entire watershed the user can specify input data that controls whether or not these files should to be linked.

StateMod allows a unit response (*.urm) or delay *.dly) file data to be provided in a free format. In order for SmLink to differentiate between an ID and data, columns 1-12 should be reserved for an ID. See below for an example free format unit response file where the ID is URM_1, 12 unit response values of 10 are provided as input, and columns 1-12 are reserved for an ID designation.

```
URM_1       12  10. 10. 10. 10. 10. 10. 10. 10. 10. 10.
            10. 10  (data begins in column 13)
```

StateMod allows an operating rule (*.opr) file to be provided in free format. In order for SmLink to differentiate between an ID and data, columns 1-12 should be reserved for an ID. See below for an example free format operating rule file with monthly on off switch.

```
Opr_Mead.01 Opr_Meadow_D&S_01              100.00000    12.    1
            1 1 1 1 -15 0 0 0 0 0 0 0 (on/off data begins in column 13)
```

Options

Smlink expects a command file which, if not provided, defaults to 'smlink.rsp'.

SmLink has the capability to perform the following types of edits to an input file

-delsta(fn,id) Delete station ID from file fn

-addrec(fn,rec) Adds a record (rec) to file (fn).

-repzero(fn,id,zero) Set data for station (id) in file (fn) to zero.

Example

```
#       SmLink.rsp
#
#       Output File name (e.g. wslope)
wslope
#
#
# ___________________________________________________________
#       Compare and link selected files
#      (0=no compare and use first file read, 1 yes compare and link files)
#       nEva = evap; nPre = precip; nStr = structure, nIpy = Irrigation Practice,
#       nDly = delay file; nUnit output units = 1 cfs, 2=af, 3=kaf
# nEva nPre nStr nIpy nDdc nDly nUnit
     0    0    0    0    0    0     3
# ___________________________________________________________
#
#       Input File names (e.g. cm2009H.rsp)
\w\statem\Verification\Base\YM2009\ym2009H.rsp
\w\statem\Verification\Base\WM2009\wm2009H.rsp
\w\statem\Verification\Base\SJ2009\SJ2009H2.rsp
```

```
\w\statem\Verification\Base\CM2009\cm2009H2.rsp
\w\statem\Verification\Base\GM2009\gm2009H2.rsp
#
#       River Network
#       09152500 is Gunison R nr Grand Junction
#       420541 is Redlands Power
#       950050 is Redlands Irrig
-delsta(cm2009.rin,09152500)
-delsta(cm2009.rin,420541)
-delsta(gm2009.rin,680636)
#
#       Diversion Stations
-delsta(gm2009.dds,420541)
-delsta(gm2009.dds,680636)
#
#       Add compact node Station, water right and demand
-addrec(gm2009.ifs,Compact_Dem Compact_Dem             Compact_Dem        1
COMPACT_DEM  0                2)
-addrec(gm2009.ifr,Compact_Dem Compact_Dem             Compact_Dem        1.00000
99999.99       1)
-addrec(gm2009.ifa,     Compact_Dem  9999999 9999999 9999999 9999999 9999999
9999999 9999999 9999999 9999999 9999999 9999999 9999999)
#

-repzero(cm2009.rih,950040,zero)
-repzero(cm2009.rih,504600,zero)
-repzero(ym2009.ddh,584686,zero)
-repzero(ym2009H.ddm,584686,zero)
#
-addrec(gm2009.rin,End_File_1  File 1-Compact_Dem  _OTHCompact_Dem  End_File_1
-999)
-addrec(gm2009.rin,End_File_2  File 2-420541       _OTH420541       End_File_2
-999)
-addrec(gm2009.rin,End_File_3  File 3-Compact_Dem  _OTHCompact_Dem  End_File_3
-999)
-addrec(gm2009.rin,End_File_4  File 4-Compact_Dem  _OTHCompact_Dem  End_File_4
-999)
-addrec(gm2009.rin,End_File_5  File 5-Compact_Dem  _OTHCompact_Dem  End_File_5
-999)
-addrec(gm2009.rin,Compact_Dem Compact_Dem         _IFSEnd_All      Compact_Dem
-999)
-addrec(gm2009.rin,End_All     End)
```

9.3 StateMod File Comparison

The smfc program is written in FORTRAN and expects a command file with data. Smfc does the following for StateMod applications:

- Reads and compares 2 or more StateMod input or output files. The user has the ability to:

    Compare all StateMod input files associated with a run if the file to be compared is a response (*.rsp) file.

    Compare just one file if the file to be compares is anything except a response file (e.g. *.dds, *.res, *.xpl, etc.).

Constraints used by the model include:

StateMod allows a unit response (*.urm *.urd or *.dly) file data to be provided in a free format. In order for SmFc to differentiate between an ID and data, columns 1-12 of a unit response file should be reserved for an ID. See below for an example free format *.urm file where the ID is URM_1, 12 unit response values of 10 are provided as input, and columns 1-12 are reserved for the ID designation.

```
URM_1      12  10. 10. 10. 10. 10. 10. 10. 10. 10. 10.
               10. 10
```

StateMod allows an operating rule (*.opr) file to be provided in free format. In order for SmLink to differentiate between an ID and data, columns 1-12 should be reserved for an ID. See below for an example free format operating rule file with monthly on off switch.

```
Opr_Mead.01 Opr_Meadow_D&S_01            100.00000     12.     1
        1 1 1 1 -15 0 0 0 0 0 0 0 0 (on/off data begins in column 13)
```

It is common for a well water right to be assigned more than one structure. Therefore when comparing a well right file, differences may be expected.

Options

If a command file is not provided, the program defaults to smfc.rsp.

If a response (*rsp) file is provided on the file to compare (line 2) then the code will compare all files contained in the response files.

If any file other than a response if provided then it only compares those two files.

Has the option to print all lines in a comparison (iprint=0) or only lines where differences occur (iprint=1).

Following is the information in a typical command file:

```
  Line 1: Print control (iprint) 0=print all; 1=print only delta
  Line 2: Comparison control (e.g. .rsp, .dds, etc)
  Line 3: Output file name
  Line 4: File 1 to compare
  Line 5: File 2 to compare
```

Example

```
#
# Smfc.rsp; response file to smfc.for; StateMod file compare
#
# 1. iprint 0=print all; 1=print only delta
1
#
# 2. Files to compare (.rsp = all)
.rsp
#
# 3. Output File name
SmFc.out
```

```
#
# 4. File 1 to compare
/usr2/crdsswork/statemod/white/whiteH.rsp
#
# 5. File 2 to compare
/usr2/crdsswork/statemod/whiteT/whiteTH.rsp
```

9.4 StateDMI

The StateDMI provides the following assistance to the StateMod Model:

- Creates a river network (*.rin) file that identifies relative location (upstream or downstream) of nodes in a model network.
- Creates a river station (*.ris) file that describes the names and locations of nodes where baseflows are known.
- Creates a stream estimate station coefficient data (*.rib) file with proration coefficients to calculate baseflows for nodes where baseflows are not known.
- Creates a reservoir structure (*.res) file that describes the physical properties of each reservoir in the system.
- Creates a reservoir rights (*.rer) file that contains data associated with reservoir storage rights.
- Creates an instream flow structure (*.ifs) file that describes the physical properties of each instream flow in the system.
- Creates an instream flow rights (*.ifr) file that contains data associated with instream flow water rights.
- Create an instream flow demand (*.ifa) file that contains annual instream flow demands (12 monthly values) for each instream flow.
- Creates a well structure (*.wes) file that describes the physical properties of each well in the system.
- Creates a well rights (*.wer) file that contains data associated with ground water rights.
- Create a well demand (*.wem) file that contains demands for well structures.
- Creates a direct diversion structure (*.dds) file that describes the physical properties of each direct diversion in the system.
- Creates a direct diversion rights (*.ddr) file that contains data associated with diversion water rights.
- Creates an historic diversion (*.ddh) file by extracting diversion data from the CDSS database.
- Fills missing historic diversion data from user supplied information.

- Calculates the average system efficiency for irrigation structures based on historic diversion data and irrigation water requirement data provided by the CU model, StateCU (see below).

- Creates a demand (*.ddm) file based on calculated or user supplied efficiency data and farm irrigation water requirement data provided by the CU model, StateCU (see below).

- Extracts irrigated acreage and crop mix (*.cds) data from the CDSS database.

For a complete description of the StateDMI see CDSS web site (http://cdss.state.co.us).

9.5 TSTool DMI

The TSTool DMI provides the following assistance to the StateMod Model:

- Extracts historic streamflow data from CDSS database.

- Fills missing streamflow data from user supplied parameters.

- Extracts historic reservoir End-of-Month data from CDSS database.

- Fills missing EOM data from user supplied parameters.

- Extracts precipitation and evaporation data to build the net evaporation file (*.eva) for StateMod.

For a complete description of the TSTool DMI see CDSS web site (http://cdss.state.co.us).

9.6 StateCU Model

The StateCU Model provides the following assistance to the StateMod Model:

Provides irrigation water requirement data for estimating irrigation structure efficiencies and calculated demands (as opposed to historic diversions).

For a complete description of the StateCU Model see CDSS web site (http://cdss.state.co.us).

9.7 SmNewRsp StateMod Response

The StateMod Response File preprocessor (SmNewRsp) allows a discontinued StateMod response file to be read and a new StateMod file constructed that is consistent with the Version 10.30 update that allows files to be provide in any order using a file descriptor. As presented below SmNewRsp keys on the suffix recommended and typically used in an existing StateMod response file to build a control file that is consistent with version 10.30 and greater. Note that if any existing file that does not contain a standard, recommended name SmNewRsp will warn the user but will not try to determine the file type. Also, since the new response file format was adopted with version 10.30, any files added after that time (e.g. Plans, Reservoir Return Data, etc.) are not processed. Similar to files with a non-standard suffix, SmNewRsp will warn the user but will not try to determine the file type. When a warning is encountered, the output from SmNewRsp will typically require hand editing before they can be successfully used by StateMod.

To execute SmNewName the user simply types:

SmNewName flname.rsp

where flname.rsp is an old sequential StateMod response. The new random response file is named SmNewRsp.out. Also execution notes and warnings are reported in file named SmNewRsp.log.

Files processed by SmNewRsp (those in existence before version 10.30)

#	Standard Suffix	File Descriptor	Example Name
1	*.ctl	Control	rgTWD.ctl
2	*.rin	River_Network	rgTW.rin
3	*.res	Reservoir_Station	rgTW.res
4	*.dds	Diversion_Station	rgTW.dds
5	*.ris	StreamGage_Station	rgTW.ris
6	*.ifs	Instreamflow_Station	rgTW.ifs
7	*.wes	Well_Station	rgTW.wes
8	*.ifr	Instreamflow_Right	rgTW.ifr
9	*.rer	Reservoir_Right	rgTW.rer
10	*.ddr	Diversion_Right	rgTW.ddr
11	*.opr	Operational_Right	rgTW.opr
12	*.wer	Well_Right	rgTW.wer
13	*.dum	Precipitation Monthly	rgTW.pre
14	*.eva	Evaporation_Monthly	rgTW.eva
15	*.rim	Stream_Base_Monthly	rgtw.rim
16	*.ddm	Diversion_Demand_Monthly	rgTW.ddm
17	*.dda	Diversion Demand Average Monthly	rgTW.dda
18	*.ddo	Diversion Demand Override	rgTW.ddo
19	*.ifm	Instreamflow_Demand_Monthly	rgTW.ifm
20	*.ifa	Instreamflow_Demand_AverageMonthly	rgTW.ifa
21	*.wem	Well_Demand_Monthly	rgTW.wem
22	*.dly	DelayTable_Monthly	rgTW.dly
23	*.tar	Reservoir_Target_Monthly	rgTW.tar
24	*.ipy	IrrigationPractice_Yearly	rg.ipy
25	*.iwr	ConsumptiveWaterRequirement_Monthly	rg.iwr
26	*.par	SoilMoisture	rg.par
27	*.eom	Reservoir_Historic_Monthly	rgTW.eom
28	*.rib	StreamEstimate_Coefficients	rgTW.rib
29	*.rih	StreamGage_Historic_Monthly	rgTW.rih
30	*.ddh	Diversion_Historic_Monthly	rgTW.ddh
31	*.weh	Well_Historic_Monthly	rgTW.weh
32	*.gvp	GeographicInformation	rgTW_StateMod.gvp
33	*.out	OutputRequest	RgTW.out
34	*.rid	Stream_Base_Daily	rgTWD.rid
35	*.dum	Dummy	rgTWD.dum
36	*.dum	Dummy	rgTWD.dum
37	*.dum	Dummy	rgTWD.dum
38	*.dum	Dummy	rgTWD.dum
39	*.dld	DelayTable_Daily	rgTwD.dld
40	*.iwd	ConsumptiveWaterRequirement_Daily	rgTWD.iwd
41	*.rhy	StreamGage_Historic_Daily	rgTWD.rhy

42	*.dhy	Diversion_Historic_Daily	RgTWD.dhy
43	*.why	Well_Historic_Daily	RgTWD.why
44	*.eoy	Reservoir_Historic_Daily	RgTWD.eoy

9.8 SmDelay StateMod Delay File Program

The StateMod Delay File Program (SmDelay) allows a daily StateMod delay file (*.dly or *.urD) to be created from an existing StateMod monthly delay file (*.dly or .urM). The approach used to estimate daily data is to construct a pattern by connecting the midpoints of monthly data. The result is a smooth daily estimate.

To execute SmDelay the user simply types:

SmDelay flname.rsp

where flname.rsp is a response file that that includes the name of the existing monthly delay file and the name of the new daily delay file to be created. Following is an example:

```
#
# smDelay.rsp;
#   Response file to create a daily delay file from a monthly file
#
#
# Name
#---------------
rg2005.urM                    Existing Monthly delay file
rg2005.urD                    New Daily delay file
```

10.0 Discontinued but Supported File Formats

This section describes input files that are discontinued but continue to be supported. This support is provided to allow prior developments to continue to operate. They include:

10.1 Response File (Sequential)

10.2 Soil Moisture Parameter File (*.par)

10.3 Irrigation Practice (*.ipy) File

10.4 Operating Rule (*.opr) File

10.1 Response File (*.rsp)

The response file contains the names of all other data files required to run the model. This file is read by subroutine StateM. Note that Version 10.30 and greater allows a user to enter response file data using one of two formats; random and sequential. StateMod reads the first file type and based on the occurrence of the character '=' in the first file name it determines if the file is random (contains a '=') or sequential (does not contain a '=').

The random file approach allows file names to be entered in any order as described below under Random Response Format. Any file type that is not required for a simulation is simply not included. Also any file name may be commented out by including a '#' character in column 1. Its format is described in the Chapter 4.0 Input Description.

The sequential file contains file names or a dummy name for every file type. It is described below. Also to allow StateMod to be backward compatible, well data (*.wes, *.wer, *.wem, and *.weh), the monthly instream demand (*.ifm), San Juan Recovery Plan sediment file (*.sjr), annual time series file (*.ipy), irrigation water requirement file (*.iwr) and soil moisture file (*.par) should not be provided unless specified in the control (*.ctl) file. See files with footnotes in the following table.

Sequential File Format

Row-data	Variable	Description
		Format (a72)
Control and Network Files		
1-1	filena	Control file (*.ctl)
2-1	filena	River Network file (*.rin)
Station Files		
3-1	filena	Reservoir Station file (*.res)

4-1	filena	Direct Diversion Station file (*.dds)
5-1	filena	River Station file (*.ris)
6-1	filena	Instream Flow Station file (*.ifs)
7-1	filena (1)	Well Station file (*.wes)

Right Files

8-1	filena	Instream Flow Right file (*.ifr)
9-1	filena	Reservoir Right file (*.rer)
10-1	filena	Direct Diversion Right file (*.ddr)
11-1	filena	Operational Right file (.opr)
12-1	filena (1)	Well Right file (*.wer)

Climate and Stream Files

13-1	filena	Precipitation file - monthly (*.pre)
14-1	filena	Evaporation file - mon or ann (*eva)
15-1	filena	Streamflow file - mon (*.rim or *.xbm)

Demand Files

16-1	filena	Direct Flow demand file - mon (*.ddm)
17-1	filena	Direct Flow demand overwrite - mon (*.ddo)
18-1	filena	Direct Flow demand file - ann (*.dda)
19-1	filena (2)	Instream demand file - monthly (*.ifm)
20-1	filena	Instream demand file - annual (*.ifa)
21-1	filena (1)	Well structure demand file - mon(*.wem)

Delay and Reservoir Target Files

22-1	filena	Delay Table file - monthly (*.dly)
23-1	filena	Reservoir Target file - mon (*.tar)

Optional Files

24-1	filena (3)	SJRIP sediment file - annual (*.sjr)
25-1	filena (4)	Annual Time series file - annual (*.ipy)
26-1	filena (5)	Consumptive Water Req. - monthly (*.iwr)
27-1	filena (6)	Soil Moisture file - annual (*.par)

Historical and Base Streamflow Files

28-1	filena	Historic Res. EOM data - monthly (*.eom)
29-1	filena	Base Streamflow data (*.rib)
30-1	filena	Historic Streamflow data - monthly (*.rih)
31-1	filena	Historic Diversion data - monthly (*.ddh)
32-1	filena (1)	Historic Well Pumping - monthly (*.weh)

Output Control Files

33-1	filena	GIS data files (*.gis)
34-1	filena	Output Control file (*.out)

Daily Files

35-1	filena (7)	Streamflow file - daily (*.rid)
36-1	filena (7)	Direct Flow demand file - daily (*.ddd)
37-1	filena (7)	Instream demand file - daily (*.ifd)
38-1	filena (1,7)	Well demand file - daily (*.wed)
39-1	filena (7)	Reservoir Target file - daily (*.tad)
40-1	filena (7)	Delay Table file - daily (*.dld)
41-1	filena (5,7)	Consumptive Water Req. - daily (*.iwd)
42-1	filena (7)	Historic Streamflow data - daily (*.riy)
43-1	filena (7)	Historic Diversion data - daily (*.ddy)
44-1	filena (7)	Historic Well Pumping - daily (*.wey)
45-1	filena (7)	Historic Res. EOM data - daily (*.eoy)

(1)Well data (.wes, *.wer, *.wem, and *.weh) should only be provided when variable iwell = 1 in the control (*.ctl) file*

(2) A monthly instream flow file (.ifm) should only be provided when variable ireach = 2 or 3 in the control (*.ctl) file*
(3) A San Juan Recovery Sediment file (.sjr) should only be provided when the variable isjrip is not zero in the control (*.ctl) file*
(4) An Annual time series file (.ipy) should only be provided when the variable itsfile is not zero in the control (*.ctl) file*
(5) An Irrigation water requirement file should only be provided when the variable ieffmax is not zero in the control (.ctl) file*
(6) A Soil Moisture Parameter file (.par) should only be provided when the variable soild is not zero in the control (*.ctl) file*
(7) Daily data should only be provided when the variable iday is not zero in the control file

10.2 Soil Parameter File (*.par)

The structure parameter file (*.par) contains soil moisture data required to perform soil moisture accounting. The soil moisture reservoir available to each structure is the parameter *awcr* multiplied by the structures area multiplied by average depth for every structure in the system specified in the control file (*.ctl) by variable *soild* (feet). It is formatted exactly the same as the soil parameter file used by the consumptive use model (StateCU), therefore it often contains data prior to and beyond the variable *awcr* that is not used by StateMod. Data can be entered in any order.

When this discontinued format is provided the following format string should be entered at the top of the file: # FileFormatVersion 1. If the above string is not provided StateMod will try to read the file and try to determine the appropriate type.

Row-data	**Variable**	**Description**
Control Data		
1		Format (i4, 1x, a12, 12f8.0)
1-1	cistat	Station ID
1-2	awcr(1-12,1)	Available soil moisture (inches per inch)
		Repeat for the number of stations numdiv

10.3 Irrigation Parameter Yearly Data File - Annual (*.ipy)

The annual CU time series file contains information required to perform calculations using a variable efficiency approach. The current standard is to provide 4 water supply and irrigation method combinations (Surface Supply Flood Irrigation, Surface Supply Sprinkler Irrigation, Ground Supply Flood Irrigation and Ground Supply Sprinkler Irrigation). A discontinued but still supported format includes total ground water and total sprinkler data.

When this discontinued format is provided the following format string should be entered at the top of the file: # FileFormatVersion 1. If the above string is not provided StateMod will try to read the file and try to determine the appropriate file type. Regardless if the file format string is or is not provided the discontinued total ground water and sprinkler data are distributed to four land use types as follows:

Water Supply Irrigation Method	Approach
Ground Supply Sprinkler Irrigation	= Minimum (Total Ground Water and Total Sprinkler Irrigation)
Surface Supply Sprinkler Irrigation	= Total Sprinkler – Ground Supply Sprinkler Irrigation
Ground Supply Flood Irrigation	= Total Ground Water – Ground Supply Sprinkler Irrigation
Surface Supply Flood Irrigation	= Maximum (0.0 or Total Area - Ground Supply Sprinkler Irrigation – Surface Supply Sprinkler Irrigation – Ground Supply Flood Irrigation).

```
Row-data       Variable            Description

Control Data
1                                  Format (i5,1x,i4,5x,i5,1x,i4,a5,a5)
1-1            ibm                 Beginning month of data (e.g. 1=Jan)
1-2            iby                 Beginning year of data (e.g. 1975)
1-3            iem                 Ending month of data
1-4            iey                 Ending year of data
1-5            cunit               Units of data ('   NA')
1-6            cyr                 Year type
                                      '  CYR'= calendar year (1-12)
                                      '  WYR'= water year (10-9)
                                      '  IYR'= irrigation year (11-10)

Time Series Data
2                                  Format (i4,1x,a12,3f6.0,2f8.0,f12.0,f3.0,f8.0)
2-1            idly                year
2-2            ID                  Structure ID
2-3            ceff                Conveyance efficiency (decimal)
2-4            feff                Maximum flood efficiency (decimal)
2-5            seff                Maximum sprinkler efficiency (decimal)
2-6            gacre               Acres with a ground water supply
2-7            sacre               Acres with a sprinkler supply
2-8            mprate              Maximum pumping rate (af/mo)
2-9            gwmode              Ground water use mode (see Section 7.10)
                                     1 = maximum supply mode
                                     2 = mutual ditch supply mode
2-10           areax               Irrigated acreage for year idly (ac)
```

10.4 Operational Right File (*.opr)

Beginning with version 12.0 an operating rule file format was adopted that includes six (6) additional variables associated with water reuse, diversion type, etc.(see table below). When this discontinued format is provided the following format string should be entered at the top of the file: # FileFormatVersion 1. If the above string is not provided StateMod will try to read the file and try to determine the appropriate file type. Regardless if the file format string is or is not provided the discontinued operating rule file will assign the following default values:

Data Type	Variable	Default Value
Associated Plan Data	creuse	NA
Diversion Type	cdivtyp	NA
Conveyance Loss (%)	OprLoss	0
Miscellaneous Limits	OprLimit	0
Start Date	IoBeg	First year of operation
End Date	IoEnd	Last year of operation

11.0 Release Notes

Since the State of Colorado took over the maintenance of the program in 1986 the model has undergone numerous enhancements. As presented in **Table 1** key enhancement occurred in 1988 to allow a daily time step, 1989 to include wells, 2001 to allow variable efficiency, 2006 to include plans (augmentation, administration, re-use, Term & Condition, etc.) and 2007 to allow four land use types (SW Flood, SW Sprinkler, GW Flood and GW Sprinkler) under a single ditch system. With each major enhancement significant effort has been made to maintain existing file formats and processes so that historic applications can be duplicated. In general, a new primary version number (e.g. 9x) was initiated whenever an existing input format, output format, or significantly new process was added. Similarly relatively minor enhancements that do not impact existing formats or process get in a new sub version number (e.g. 9.12).

Table 1.1
Major StateMod Enhancements

Version	Year	Areas of Key Enhancements
1.	1986	Original Development
2. – 4.	1995	Baseflow module enhancement New reporting capabilities
5.	1996	Allow multiple replacement reservoirs and reoperate for non-downstream return flows
6.	1996	Enhanced binary file reporting. New reporting capabilities
7.	1997	Treat Instream flows as a Reach Linked model capability
8.	1998	Daily simulation capability
9.	1999	Well simulation capability
10.	2001	Variable efficiency capability
11.	2006	Plans. Operating rules that allow plans, diversion type, carrier losses, annual limits and on/off dates
12.	2007	Irrigation Practice File is allowed to contain 4 land use types (SW Flood, SW Sprinkler, GW Flood and GW Sprinkler)

12.0 References

- Bennett, Ray R. December 2000. "State of Colorado's Water Resources Model (StateMod) Documentation." Report presented to Colorado Water Conservation Board and Colorado Division of Water Resources. Denver, Colorado.

- Boyle Engineering Corporation. 1986. Green Mountain Pump Back and Exchange Project. Colorado Water and Power Authority, Denver, Colorado.

- Otradovsky, Fred J. 1985.

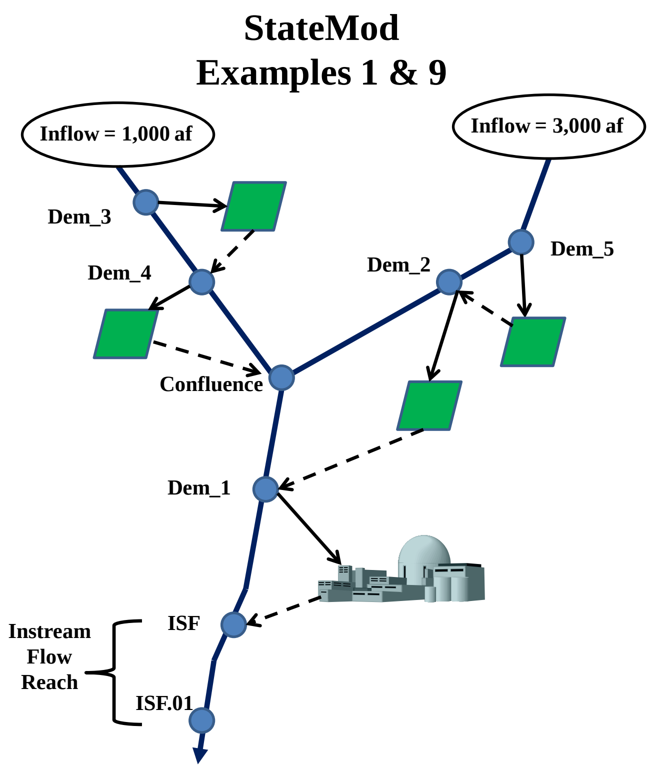
Appendix A Examples

This chapter provides fourteen (14) examples of implementing StateMod. In general, each example builds upon a previous one to include more complex applications. This sequential approach, that builds complexity by adding new elements, is recommended when the model is applied to a real world situation in order to gain confidence with the results and understand the system response without getting prematurely burdened with the more complex operations of a river system. Following are the examples provided in this chapter:

- Example 1 A simple 8 node network with 3 demands and 1 instream flow reach
- Example 2 Same as Example 1 plus a reservoir and an operating rule.
- Example 3 Same as Example 2 plus operating rules to serve a demand and instream flow by a direct reservoir release.
- Example 4 Same as Example 3 plus an operating rule to serve a demand via exchange.
- Example 5 Same as Example 3 plus an operating rule to serve a demand via a carrier (conduit).
- Example 6 Baseflow (natural flow) generation assuming development consistent with Example 4.
- Example 7 Same as Example 3 plus wells.
- Example 8 Same as Example 3 but the simulation uses a daily time step.
- Example 9 Same as Example 1 plus an operating rule to serve a demand via exchange using a portion of another structure's direct flow right.
- Example 10 Same as Example 1 plus operating rules to store a portion of another structure's direct flow right in an accounting plan and then serve a demand by a release from this plan.
- Example 11 Same as Example 10 plus a reservoir and operating rules that calculate terms and conditions (T&C) demands associated with use of the pro-rata water right and serve the T&C demand by a direct reservoir release.
- Example 12 Same as Example 11 plus a reservoir and an operating rule to store a portion of another structure's direct flow rights in a reservoir and associated reservoir reuse plan.
- Example 13 Same as Example 12 plus an operating rule to color reusable effluent in a non reservoir reuse plan.
- Example 14 Same as Example 7 with lagged well depletions assigned to an augmentation well plan.

Example 1

Example 1 is a simple 8-node network with five demands: 1 municipal (Dem_1), 4 irrigation (Dem_2 through Dem_5) and one instream flow reach (ISF). A schematic of Example 1 is presented below:



Input Data:

This simple application requires the following 13 input files (see [Example 1 Data]) as follows:

1. The response (*.rsp) file describes the input data files and directories where they reside.
2. The control (*.ctl) file describes the operational switches and unit conversions. It also contains title cards to be used on output files.
3. The river network (*.rin) file describes the network. For example, Dem_3 flows to Dem_4, Dem_4 flows to the confluence, etc.
4. The river station (*.ris) file describes the inflow locations to the river network. For this example, flows enter the system at river nodes Dem_3, Dem_5 and ISF.01.
5. The Streamflow (*.rim) file describes the stream flows into the system. For example, there is 1,000 AF at Dem_3, 3,000 AF at Dem_5, and 4,000 AF at ISF.01 in month 1 of year 1. These values are the same for every month, except May and June when they increase by a factor of 5. Note the streamflow data provided is total flow per the control file (*.ctl) variable ***ipflo***.
6. The direct diversion station (*.dds) file describes the station characteristics of direct diversions. For example, Dem_3 has a capacity of 5,000 CFS. It is 50% efficient and uses unit response table 1 (*.urm). All (100%) of this diversion's return flows go to Dem_4.

7. The direct diversion right (*.ddr) file describes the water rights associated with each direct diversion. For example, Dem_2 has one right for 60 CFS with an administration number of 6.00000.
8. The direct flow demand (*.ddm) file describes the demands for each direct diversion structure. For example, Dem_1 has a constant demand of 2,000 AF in all months and years. The period of record contained in the file (1980), units (AF/M) and type of year (WYR, water year) are included in header cards.
9. The instream flow (*.ifs) station file describes the Instream flow station data. For example, Instream flow reach ISF is located from ISF to ISF.01.
10. The instream flow right (*.ifr) file describes the Instream flow water rights. For example, Instream flow reach ISF has one water right for 65.5 CFS with an administration number of 9.00000.
11. The instream flow demand (*.ifa) file describes the Instream flow demands. For example, Instream flow reach ISF has a constant demand of 65.5 CFS for all months and years of the study period. The period of record contained in the file (constant), units (CFS) and type of year (WYR, water year) are included in header cards.
12. The monthly unit response file (*.urm) contains monthly return flow patterns. For example, pattern 1 has 5 entries that indicate 50% of return flows in month 1, 50% in month two, and no return flows in months 3 through 5. Note each table contains a variable that indicates how many entries to expect for a given pattern. This approach, which allows the number of values in each table to vary, is the preferred method of supplying unit response data as specified by the control file (*.ctl) variable ***interv.***

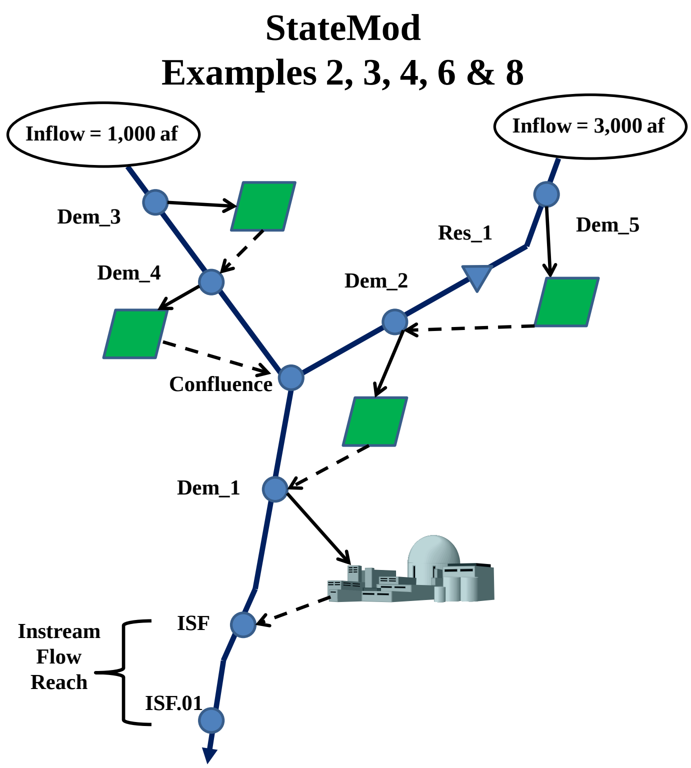
Results:

The results associated with implementing Example 1 are presented in the following files (see Example 1 Data):

1. Water Budget Information (*.xwb) Note the average annual stream inflow is 80,000 AF, the average annual diversion is 71,001 AF, the average annual stream outflow is 49,100 AF and the average annual consumptive use is 28,301 AF.
2. Water Right Information (*.xwr). This file, which is sorted by administration number, indicates the most senior water right is 100 CFS and is associated with Dem_1, followed by 60 CFS for Dem_2, 100 CFS for Dem_3, 65.5 CFS for Instream flow ISF, etc.
3. Diversion Summary (*.xdd). This file provides a water balance at each river node. Note the diversion with the most senior water right, Dem_1, is always satisfied. Diversions with more junior water rights (Dem_2, Dem_3 and ISF) get shorted for different amounts and times until they are able to benefit from return flows accruing to the system.

Example 2

Example 2 is similar to Example 1 except a reservoir (Res_1) has been added between Dem_5 and Dem_2. A schematic of Example 2 is presented below:



Input Data:

Example 2 requires the following input files (see [Example 2 Data]) that replace or are in addition to those used in Example 1:

1. The response (*.rsp) file describes the input data files and directories where they reside. Note the directory path is used to reference files used in previous examples that do not require revision.
2. The control (*.ctl) file describes the operational switches and unit conversions. It also contains title cards to be used on output files.
3. The reservoir station (*.res) file describes the station characteristics of the reservoir Res_1. For example, Res_1 has a maximum capacity of 100,000 AF, two owners with 50,000 AF each, and 10 area-capacity-seepage data points. The administration date (date when current contents are charged against their decree for that year) is set to 11, November. For reservoir evaporation and precipitation calculations it uses 100% of station ID 5001.
4. The reservoir right (*.rer) file describes the water rights associated with each reservoir. For example, Res_1 has one right for 100,000 AF with an administration number of 15.00000. Also the ownership variable (iresro) is set to -2, which indicates the water right fills both (first two) reservoir accounts.

5. The operating rule (*.opr) file describes operating rules associated with the reservoir. For example, operating rule Opr_1 allows Res_1 to make a target release (operating rule type 9) at administration number 10.00000.
6. The evaporation (*.eva) file describes net evaporation for station 5001. For example, station 5001 has a net evaporation of 0.01 feet in March, 0.13 feet in April, etc. in 1980. Note this file contains net evaporation because the control file (*.ctl) variable ***numpre*** indicates that no precipitation stations are provided. Since net evaporation is allowed, so too are negative values (more precipitation than evaporation). The control file (*.ctl) variable ***efacto*** defines the unit of the data to be feet.
7. The reservoir target (*.tam) file describes the maximum and minimum reservoir targets. For example, the minimum target is 0 AF and the maximum target is 100,000 AF in all months.

Results:

The results associated with implementing Example 2 are presented in the following files (see Example 2 Data):

1. Water Budget Information (*.xwb). Note the average annual stream inflow is the same as Example 1 at 80,000 AF. However the average annual diversion, outflow, and consumptive use have changed to 71,001 AF, 25,100 AF and 30,956 AF, respectively. The change in diversion, outflow and consumptive use is due to the reservoir right storing water in the high spring runoff months, as illustrated by reservoir change of 21,344 AF.
2. Water Right Information (*.xwr). This file, which is sorted by administration number, indicates why average annual diversions, outflow and consumptive use were reduced when comparing Example 2 to Example 1. The reservoir storage right has an administration number of 15.00000, which makes it junior to the water rights of Dem_2, Dem_3 and ISF.
3. Diversion Summary (*.xdd). This file provides a water balance at each river node. Note the diversion with the most senior water right, Dem_1, is always satisfied. Diversions with more junior water rights (Dem_2, Dem_3 and ISF) get shorted by the same amounts as Example 1 since reservoir diversions are junior to these water rights.
4. Reservoir Summary (*.xre). This file describes the reservoir as a total (account 0) and by each individual account (accounts 1 and 2). Note for the total reservoir, storage is less than the target contents so no releases are made for seepage and spill.
5. Operational Right Summary (*.xop). This file summarizes the activities associated with each operating rule. Since no releases were made to reach target contents, it is zero in all months.

Example 3

Example 3 is similar to Example 2 except it contains operating rules that allow the reservoir (Res_1) to supply water to a direct diversion demand (Dem_2) and an instream flow (ISF) by a direct release to the river. A schematic of Example 3 is the same as Example 2, Figure A2.

Input Data:

Example 3 requires the following input files (see Example 3 Data) that replace or are in addition to those used in Example 1:

1. The response (*.rsp) file describes the input data files and directories where they reside. Note the directory path is used to reference files used in previous examples that do not require revision.
2. The control (*.ctl) file describes the operational switches and unit conversions. It also contains title cards to be used on output files.
3. The operating rule (*.opr) file describes additional operating rules. For example, Opr_2 allows Res_1, account 1, to make a direct release to Dem_2 using a type 2 operating rule at administration number 9.00000. Opr_3 allows the reservoir to provide water to instream flow ISF via a direct release to the river using a type 1 operating rule at an administration number of 9.00000. Note when administration numbers of the same type (e.g. operating rules) are equal, the model operates in the order that data are read into the program which can be verified by viewing the water right report (*.xwr). Also both operating rules make a direct release to the river because the operating rule destinations (Dem_2 and ISF) are located on the river downstream from the reservoir.

Results:

The results associated with implementing Example 3 are presented in the following files (see Example 3 Data):

1. Water Budget Information (*.xwb). Note the average annual stream inflow is the same as Examples 1 and 2 at 80,000 AF. However the average annual diversion, outflow, and consumptive use have changed to 71,667 AF, 32,152 AF and 31,246 AF, respectively.
2. Water Right Information (*.xwr). This file, which is sorted by administration number, indicates that reservoir releases are supplemental to the receiving structure’s direct flow and instream flow rights. As described above, when administration numbers of the same type (e.g. operating rules) are equal, the model operates in the order that data are read into the program.
3. Diversion Summary (*.xdd). This file provides a water balance at each river node. The diversion with the most senior water right, Dem_1, is always satisfied. Dem_2, which is tied to the reservoir, always has no shortages because its demand is supplied by the reservoir. The instream flow ISF gets shorted in some months because Res_1, account 2, does not always have enough water to satisfy the instream demand.
4. Reservoir Summary (*.xre). This file provides a water balance at each reservoir. It describes the reservoir as a total (account 0) and by each individual account (accounts 1 and 2). Note the releases made from account 1 are for direct diversion by Dem_2 and from account 2 for ISF. Also, the distribution of the reservoir's priority storage diversion to individual accounts is proportional to their account size except for months where no storage, or very little storage capacity, is available in one of the accounts (see October 1979).
5. Operational Right Summary (*.xop). This file summarizes the activities associated with each operating rule. Note the values presented are the same as those presented in the reservoir

summary (*.xre) file and the diversion summary (*.xdd) file. The detail and format provided in this file is especially valuable when more than one operating rule takes water for the same use from the same reservoir.

Example 4

Example 4 is similar to Example 3 except it contains an operating rule that allows the reservoir to supply water to a direct diversion demand (Dem_3) by exchange. A schematic of Example 4 is the same as Example 2, see Figure A2.

Input Data:

Example 4 requires the following 3 input files (see Example 4 Data) that replace those used in Example 3:

1. The response (*.rsp) file describes the input data files and directories where they reside. Note the directory path is used to reference files used in previous examples that do not require revision.
2. The control (*.ctl) file describes the operational switches and unit conversions. It also contains title cards to be used on output files.
3. The operating rule (*.opr) file contains an additional operating rule (Opr_4) that allows Res_1, account 1 to provide water to Dem_3 by exchange using a type 4 operating rule at an administration number 9.00000. Note when administration numbers of the same type (e.g. operating rules) are equal, the model operates in the order that data are read into the program which can be verified by viewing the water right report. Also operating rule Opr_4 allows the diversion to occur by exchange because the destination (Dem_3) is located on a tributary that is not downstream from the reservoir.

Results:

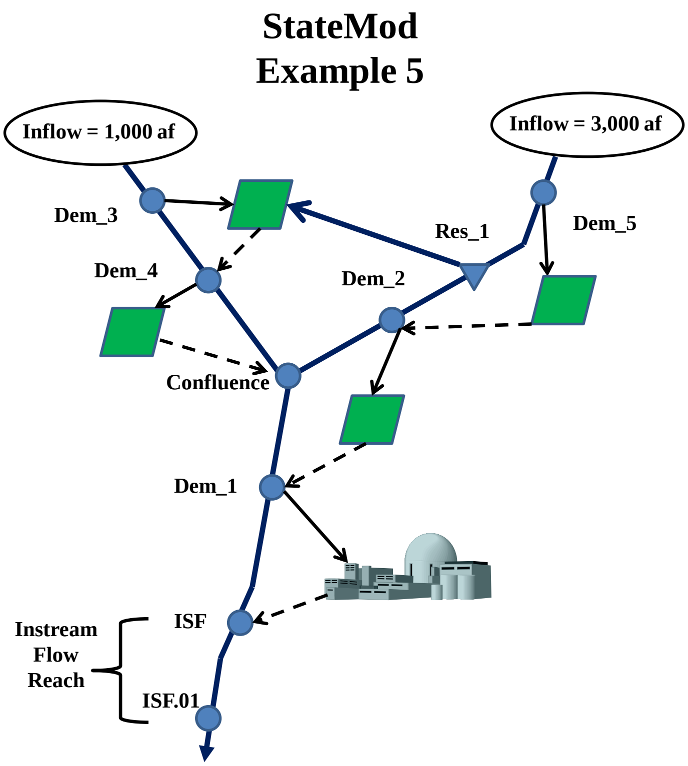
The results associated with implementing Example 4 are presented in the following files (see Example 4 Data):

1. Water Budget Information (*.xwb). Note the average annual stream inflow is the same as Examples 1, 2 and 3 at 80,000 AF. However the average annual diversion, outflow, consumptive use, and reservoir change have changed to 73,250 AF, 32,357 AF, 32,009 AF and 13,034 AF respectively.
2. Water Right Information (*.xwr). This file, which is sorted by administration number, indicates that reservoir releases are supplemental to their direct flow decrees. Note when administration numbers are equal, the model operates in the order that data are read into the program.
3. Diversion Summary (*.xdd). This file provides a water balance at each river node. Note the diversion with the most senior water right, Dem_1, is always satisfied. Dem_2 and Dem_3, which are both tied to the reservoir, are always satisfied by getting a portion of their supply from the reservoir. The instream flow ISF gets shorted in some months because Res_1, account 2, does not always have enough water to satisfy the instream flow demand.
4. Reservoir Summary (*.xre). This file provides a water balance at each reservoir. It describes the reservoir as a total (account 0) and by each individual account (accounts 1 and 2). Note the releases are made from account 1 for direct diversion by Dem_2 and for diversion by exchange to Dem_3. The instream flow, ISF, continues to receive water from account 2.

5. Operational Right Summary (*.xop). This file summarizes the activities associated with each operating rule. Note the values presented are the same as those presented in the reservoir summary (*.xre) file. The detail provided in this file is especially valuable when more than one operating rule takes water for the same use from the same reservoir.

Example 5

Example 5 is similar to Example 3 but contains an operating rule that allows the reservoir (Res_1) to supply water to a direct diversion demand (Dem_3) by a carrier (conduit) rather than by an exchange via the river. A schematic of Example 5 is presented below:



Input Data:

Example 5 requires the following input files (see Example 5 Data) that replace those used in Example 3:

1. The response (*.rsp) file describes the input data files and directories where they reside. Note the directory path is used to reference files used in previous examples that do not require revision.
2. The control (*.ctl) file describes the operational switches and unit conversions. It also contains title cards to be used on output files.
3. The operating rule (*.opr) file revises an operating rule (Opr_4) that allows the reservoir to provide water to Dem_3 via a carrier (conduit) using a type 3 operating rule at an administration number 9.00000. Note when administration numbers of the same type (e.g. operating rules) are equal, the model operates in the order that data are read into the program which can be verified by viewing the water right report. Also operating rule Opr_4 allows the diversion to occur by a carrier (conduit) because it is a type 3 rule. Finally, there is no limit on the carrier capacity because water is not routed through a diversion structure (i.e. the carrier is not included as a diversion in the model).

Results:

The results associated with implementing Example 5 are presented in the following files (see Example 5 Data):

1. Water Budget Information (*.xwb). Note the average annual stream inflow is the same as Examples 1, 2, 3 and 4 at 80,000 AF. However the average annual diversion, outflow, consumptive use, and reservoir change have changed to 73,444 AF, 32,264 AF, 32,106 AF and 13,030 AF respectively.
2. Water Right Information (*.xwr). This file, which is sorted by administration number, indicates that reservoir releases are supplemental to their direct flow decrees. Note when administration numbers are equal, the model operates in the order that data are read into the program.
3. Diversion Summary (*.xdd). This file provides a water balance at each river node. Note the diversion with the most senior water right, Dem_1, is always satisfied. Dem_2 and Dem_3, which are both tied to the reservoir, are always satisfied by getting a portion of their demand from the reservoir. The instream flow ISF gets shorted in some months because Res_1, account 2, does not always have enough water to satisfy the instream demand.
4. Reservoir Summary (*.xre). This file provides a water balance at each reservoir. It describes the reservoir as a total (account 0) and by each individual account (accounts 1 and 2). Note the releases are made from account 1 for direct diversion by Dem_2 and for diversion by a conduit to Dem_3. The instream flow, ISF, continues to receive water from account 2.
5. Operational Right Summary (*.xop). This file summarizes the activities associated with each operating rule. Note the values presented are the same as those presented in the reservoir summary (*.xre) file. The detail provided in this file is especially valuable when more than one operating rule takes water for the same use from the same reservoir.

Example 6

Example 6 demonstrates a Baseflow (natural) streamflow generation. It recognizes historic streamflow exists or has been estimated at river nodes located just below Dem_3, Res_1 and ISF.01. Example 6 also recognizes the facilities in place are those described under Example 4. A schematic of Example 6 is the same as Example 2, see Figure A2.

Input Data:

Example 6 requires the following input files (see Example 6 Data) that replace those used in Example 4:

1. The response (*.rsp) file describes the input data files and directories where they reside. Note the directory path is used to reference files used previous examples that do not require revision.
2. The control (*.ctl) file describes the operational switches and unit conversions. It also contains title cards to be used on output files.

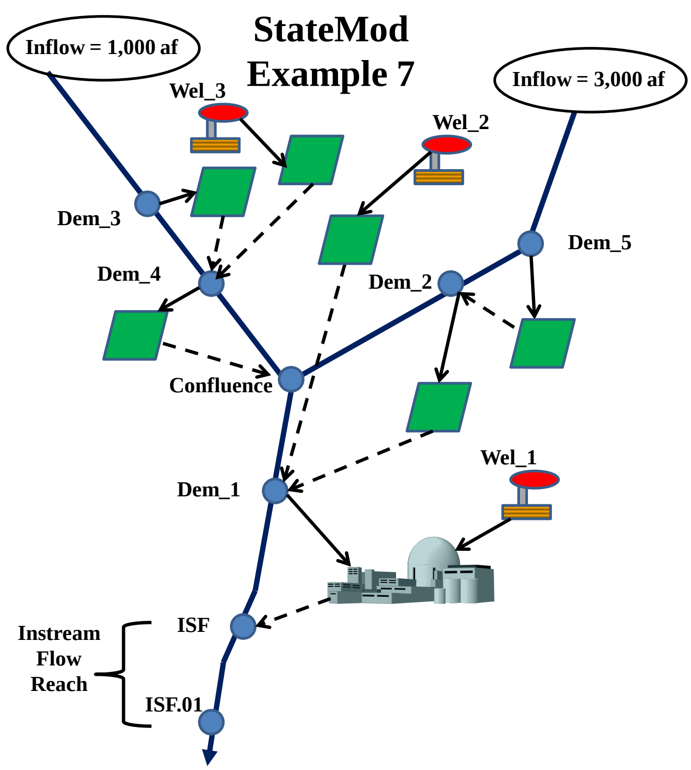
Results:

The results associated with implementing Example 6 are presented in the following files (see Example 6 Data):

1. Baseflow Information (*.xbi). This file describes the Baseflow calculations for each stream gage in a spreadsheet format. As presented in November at Dem_3 the natural flow is estimated to equal 1,556 AF; the historic gaged flow (1,000 AF) plus the historic upstream diversion (556 AF). Similarly in November at ISF, the natural flow is estimated to equal 2,599 AF, equal to the historic gaged flow (4,000 AF) plus the historic upstream diversions (4,456 AF) less historic upstream return flows (1,254 AF) and historic reservoir storage changes (3,961 AF).
2. Baseflow Data (*.xbm). This file describes the Baseflow estimates that could be used in a simulation if the file name is referenced in the control file.

Example 7

Example 7 is similar to Example 1 except it contains three well structures (Wel_1, Wel_2 and Wel_3). Well structures Wel_1 and Wel_2 are the sole source supply to two new users with the same ID's as the well ID's. Well structure Wel_3 is a supplemental supply to a direct diversion (Dem_3). A schematic of Example 7 is presented below:



Input Data:

Example 7 requires the following input files (see Example 7 Data) that replace those used in Example 1:

1. The response (*.rsp) file describes the input data files and directories where they reside. Note the directory path is used to reference files used in previous examples that do not require revision. The response file includes a well station (*.wes), well right (*.wer), well demand (*.wem) and historic pumping file (*.weh).
2. The control (*.ctl) file describes the operational switches and unit conversions. Note: 1. The header cards have been revised to describe the example. 2. The variable icondem has been set to 3 to indicate demands for diversion structures with a supplemental well supply are provided as a total in the diversion demand file (*.ddm). 3. The well operation switch (iwell) has been set to 1 to indicate wells will be simulated.
3. The well station file (*.wes) contains well station data. Note 1. Well structures Wel_1 and Wel_2 have the associated diversion ID (divcow2) set to NA to indicate they are a sole source supply. The two wells also have demand code set to 1 to indicate monthly demand data are

expected in the monthly well demand file (*.wem). 2. Well structure Wel_3 has the associated diversion ID (divcow2) set to Dem_3 to indicate it is a supplemental supply to that structure. Wel_3 also has the demand data type (idvcomw) set to 6 to indicate monthly demand data are obtained from the direct diversion demand file (*.ddm) and not the well demand file (*.wem). 3. Wel_1 returns only 50% of its non-consumed water to the system. Since its efficiency is 50%, this implies 25% (50 % * 50%) is lost to the system. 4. Wel_3 depletes the river by 50%. This implies 50% of its pumping is salvaged (i.e. comes from evapotranspiration salvage, storage, etc. but not the river).

4. The well right file (*.wer) contains well right data. Note well structure Wel_3 has two water rights; one for 50 cfs and another for 5 cfs.
5. The well demand file (*.wem) contains well demand data. Note 1. Data are only provided for Wel_1 and Wel_2, which act as a sole source. The demand for well structure Wel_3 is obtained from the direct diversion demand file (*.ddm) for the structure with which it is associated (Dem_3). 2. If the user, for some reason, provides demand data to a well structure that is not a sole source, StateMod stops and prints a warning to the *.log file.
6. The historic well pumping file (*.weh) contains historic or estimated pumping data for each well structure. Note this data are only used by StateMod for baseflow calculations and calibration.
7. The unit response file (*.urm) contains both return flow and depletion data (see the comments on the right side of the table). Note StateMod does not differentiate between the two types of unit response data (return and depletion). Rather it is up to the user to specify which table is appropriate for a return flow or depletion calculation.
8. The output control file (*.out) contains data for well structures in addition to all other structure types.

Results:

The results associated with implementing Example 7 are presented in the following files (see Example 7 Data):

1. Water Budget Information (*.xwb). This file provides a water budget. Note 1. The columns titled From/To GW Storage, From River by Well, and Well Depletion, are non-zero because they are associated with wells. 2. The column From/To GW Storage describes water taken out of or returned to ground water storage. Water comes out of ground water storage only when depletions exceed streamflow. Water is returned to ground water storage when streamflows are available. The columns titled Loss, Pumping, and Salvage on the right hand side of the balance are relatively new additions. The Loss column is non-zero when one or more diversion or well structures have a total return flow percent that is less than 100%. The pumping column is the total pumping which impacts the stream balance through depletions and returns. The Salvage column is non-zero when one or more well structures have a total depletion that is less than 100%. A summary of loss and salvage data calculated for each structure can be printed to the *.log file when the detailed output switch (ichk) is set to 6 in the control file (*.ctl). 3. The information contained in each column of the water budget report (*.xwb) is described in Section 5.3, Report Module Output Files.
2. Water Right Information (*.xwr). This file summarizes water right data. Note 1. This file, which is sorted by administration number, indicates that the well rights are junior to other water rights in the system. 2. Well structures are type 6. 3. The column titled Str ID #2 describes a second structure associated with a water right. It is set to Dem_3 for well structure Wel_3 to indicate it is a supplemental supply to that direct diversion. This same column is set to -1 to indicate for Wel_1 and Wel_2 and other diversions to indicate they are sole source. 4. When

administration numbers equal, the model operates in the order that data are read into the program.

3. Diversion Summary (*.xdd). This file provides a water balance at each river node. The following are noted: 1. The header indicates Dem_3 has a direct flow right for 100 cfs and well rights for 55 cfs. The time series data show well pumping equals the demand not met by a direct flow priority. This occurs because the well structure Wel_3 has adequate capacity and its water rights are junior to the Dem_3 direct flow right. 3. In October 1979, 0 AF is diverted by priority and 1,000 AF is pumped. Because this well has a depletion location at Dem_3, a depletion percentage of 50% and a depletion pattern in month 1 of 25%, the amount taken from the river by a well (River by Well) equals 125 AF (1000 * .50 * .25). This is equivalent to a direct diversion from the river of 125 AF. 4. In November 1979, 778 AF is diverted by priority and 222 AF is pumped.
4. Well Summary (*.xwe). This file provides a summary of water use by each well structure. Note 1. Well structures Wel_1 and Wel_2 have no surface water supplies (From SW) because they are the sole source. Well structure Wel_3, which is a supplemental supply, has a non-zero surface water supply value. 2. Well structure Wel_1 is short because it has a demand of 3,000 AF /month and a decree of 10 cfs (615 AF for a 31-day month). 3. In October 1979, well structure Wel_1 consumes 307 AF because it pumps 615 AF and has an efficiency of 50%. 4. For that same month, it obtains 154 AF from the river because it has a 50% depletion and 25% depletion unit response in month 1. The remaining pumped water comes from ground water storage (GwStor) because this well structure has a depletion percentage of 100%. The 100% depletion percentage implies no water is salvaged.
5. Ground Water Summary (*.xgw). This file provides a ground water balance with selected inflow and outflow components missing (see footnotes 2 and 3). This file is provided with missing data because the column titled Delta, which represents Total Inflow - Total Outflow, can be valuable to a user if interpreted using engineering judgment and local knowledge. For example, if the ground water summary indicates a decrease in ground water storage this decline may represent aquifer mining, other inflows and outflows that are not simulated, or inaccurate return (loss) and depletion (salvage) data. Only engineering judgment and system knowledge can determine which of these possibilities may be occurring. Note that StateMod does not require the ground water system be in balance. However significant, long-term mining may be expected to impact the accuracy of the return flow and depletion patterns provided to the model.

Example 8

Example 8 is similar to Example 3 except the simulation uses a daily time step. A schematic of Example 8 is the same as Example 2, see Figure A2.

Input Data:

Example 8 requires 5 input files that revise the station files used in Example 3 to include a daily data source ID. Also, this example includes 5 new input files that include daily data for streamflows, direct diversion demands, daily instream demands, daily reservoir targets, and daily return flows (see Example 8 Data).

1. The response (*.rsp) file describes the input data files and directories where they reside. Note 1. The river station file (*.ris), direct diversion station file (*.dds), instream flow station file (.ifs) and reservoir station file (*.res) include a daily data source ID (described below). 2. New files have been added to represent daily streamflows (*.rid), daily direct diversion demands (*.ddd), daily instream flow demands (*.ifd), daily reservoir targets (*.tad) and daily unit response

functions (*.urd). 3. The directory path is used to reference files from a previous example that does not require revision.

2. The control (*.ctl) file describes the operational switches and unit conversions. Note: 1. The title cards (heading) have been revised to describe the example. 2. The daily switch (iday) has been set to 1 to turn on the daily option.
3. The river station file (*.ris), direct diversion station file (*.dds), instream flow station file (.ifs) and reservoir station file (*.res) include a variable which indicates how daily data will be provided to StateMod (i.e. variable *crunidy* for the river station file (*.ris)). Note 1. The daily capability of StateMod allows the user to provide daily data, divide a monthly estimate by the number of days in a month, using another gages daily distribution, etc. 2. Station ISF.01 of the river station file (*.ris) has variable *crunidy=Dem_3.* This indicates daily streamflow data at station ISF will be estimated from monthly data using the daily streamflow distribution provided by Dem_3. 3. Direct diversion station Dem_2 of river station file (*.ris) has variable *cdividy = Dem_3.* This indicates daily data at diversion station Dem_2 will be estimated from monthly data using the daily distribution provided by station Dem_3, another agricultural demand. 4. Instream Flow station ISF of the instream flow station file (*.ifs) has variable *cifridy = 0.* This indicates daily data at station ISF will be estimated to equal the monthly average. 5. Reservoir Station Res_1 has variable *cresidy = 3.* This indicates daily data will be provided for this station in the daily reservoir target file (*.tad).
4. The daily streamflow (*.rid), daily direct diversion demands (*.ddd), daily instream flow demands (*.ifd), daily reservoir targets (*.tad) and daily unit response (*.ird) contain daily data required for the simulation. Note 1. Daily data are only used if it is specified in a station file; i.e. data provided for a station that is not referenced is ignored by StateMod. 2. Because StateMod allows the user to provide daily data, divide a monthly estimate by the number of days in a month, or use another gage's daily distribution, monthly data are still used extensively by a daily application of StateMod. The only time the monthly sum of daily data takes precedence over the monthly total is when the daily data ID equals the station ID.

Results:

The results associated with implementing Example 8 are presented in the following files (see Example 8 Data):

1. Water Budget Information (*.xwb). Note the average annual stream inflow is the same as Examples 1, 2 and 3 at 80,000 AF. However the average annual diversion, outflow, and consumptive use have changed to 72,944AF, 33,825 AF and 31,887 AF, respectively.
2. Water Right Information (*.xwr). This file, which is sorted by administration number, is the same as that associated with Example 3 since the time step has no impact on the water rights used by StateMod.
3. Diversion Summary (*.xdd) and Daily Diversion Summary (*.xdy). These files provide a monthly and daily water balance at each river node. Note 1. The monthly total provided by the daily file (*.xdy) equals that provided in the monthly file (*.xdd). 2. Since StateMod's main purpose is to provide planning information, the monthly totals are expected to provide the most concise results of a simulation, even for a daily analysis. Daily data are provided for detailed review and checking. 3. The daily demand for Station Dem_2 is equal to the value provided in the monthly demand file (*.ddm). It only used daily data at station Dem_2 to get a daily distribution. 4. Results are different than a monthly model (Example 3) because of the dynamics associated with simulating daily return flows (see Section 7.7, Daily Vs. Monthly Results).
4. Reservoir Summary (*.xre) and Daily Reservoir Summary (*.xry). These files provide a monthly and daily water balance at each reservoir. It describes the reservoir as a total (account

0) and by each individual account (accounts 1 and 2). Note 1. The daily reservoir file (*.rey) shows releases made from account 1 for direct diversion by Dem_2 and the release from account 2 for the instream flow ISF sum to equal that reported in the monthly reservoir summary file (*.xre) and the monthly direct diversion file (*.xdd).

5. Operational Right Summary (*.xop). This file summarizes the activities associated with each operating rule. Note daily results are not provided since they are generally available in the daily diversion (*.xdy) and daily reservoir (*.xry) files.

Example 9

Example 9 is similar to Example 1 except it contains an operating rule that allows a pro-rata portion of a direct flow water right to be used at a different direct diversion demand by exchange. A schematic of Example 9 is the same as Example 1, see Figure A1.

Input Data:

Example 9 requires the following input files (see Example 9 Data) that replace or are in addition to those used in Example 1:

1. The response (*.rsp) file describes the input data files and directories where they reside.
2. The operating rule (*.opr) file contains a type 24 operating rule that allows a pro-rata exchange of a direct diversion right. For example, operating rule Opr_1 allows Dem_3 to take a pro-rata amount (10 percent) of the Dem_2 direct flow water right (Dem_2_WR_1) at administration number 6.00001. Also presented are the monthly and annual volumetric limits for the pro-rata exchange that are required for a type 24 rule. In Example 9, the monthly volumetrics are set to 5,000 AF during the summer (April to October) so as not to limit operations. The type 24 exchange will not simulate during the winter (November to March) since the monthly volumetrics are equal to zero during those months.

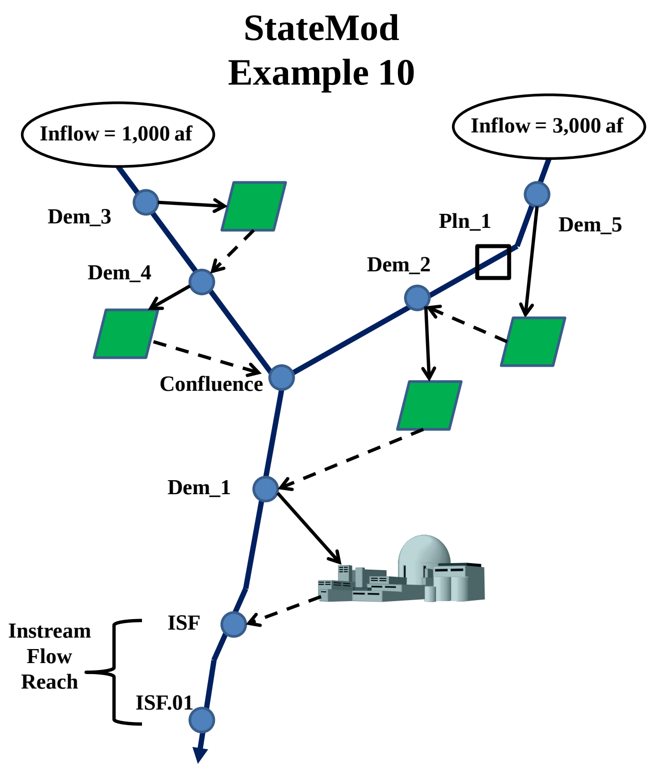
Results:

The results associated with implementing Example 9 are presented in the following files (see Example 9 Data):

1. Water Budget Information (*.xwb). Note the average annual stream inflow is the same as Example 1 at 80,000 AF. However the average annual diversion, outflow, and consumptive use have changed to 69,921 AF, 49,726 AF and 22,760 AF respectively.
2. Water Right Information (*.xwr). This file summarizes water right data. Note this file, which is sorted by administration number, indicates that the pro-rata exchange operating rule (Opr_1) is senior to the Dem_3 direct flow water right. The Dem_2 water right is listed as off since this water right is controlled by Opr_1.
3. Diversion Summary (*.xdd). This file provides a water balance at each river node. The following are noted: 1. The header indicates Dem_3 has a direct flow right for 100 cfs. 2. The time series data shows a portion of the demand met by Exc_Pln during the summer months when water is provided by the operating rule Opr_1. 3. In April 1980, 357.0 AF is diverted by Exc_Plan and 643.0 AF is diverted from the River by Priority.
4. Operational Right Summary (*.xop). This file summarizes the use of water controlled by operating rules. Results indicate that with Opr_1, the full pro-rata amount of the Dem_2 water right (60 cfs * 10% * 1.9835 = 357.0 AF for 30 dys; 368.9 AF for 31 dys) is exchanged to Dem_3.

Example 10

Example 10 is similar to Example 1 except it contains three new operating rules. The first operating rule stores a portion of a structure's direct flow right in an accounting plan (Pln_1). The second operating rule releases water from this plan to a demand (Dem_3) by exchange. The third operating rule spills any unused water in the accounting plan to the river. A schematic of Example 10 is presented below:



Input Data:

Example 10 requires the following input files (see Example 10 Data) that replace or are in addition to those used in Example 1:

1. The response (*.rsp) file describes the input data files and directories where they reside and includes an additional reference to the plan (*.pln) file.
2. The plan (*.pln) file describes the station characteristics of the accounting plan structure. Note the plan is a type 11, accounting plan, that allows water to be diverted at the administration number of its source then subsequently released, typically at a junior priority, as needed.
3. The operating rule (*.opr) file contains a type 24 operating rule Opr_1 that exchanges a pro-rata amount (10%) of the Dem_2 direct flow water right (Dem_2_WR_1) into the accounting plan (Pln_1) at administration number 6.00001.
4. The operating rule (*.opr) file contains a type 28 operating rule Opr_2 that allows the accounting plan (Pln_1) to release to a destination demand (Dem_3) via exchange at administration number 6.00002.

5. The operating rule (*.opr) file contains a type 29 operating rule Opr_3 that allows the accounting plan (Pln_1) to spill to the river at administration number 99999.00000. This operating rule is necessary since the accounting plan cannot carry water over subsequent time steps.

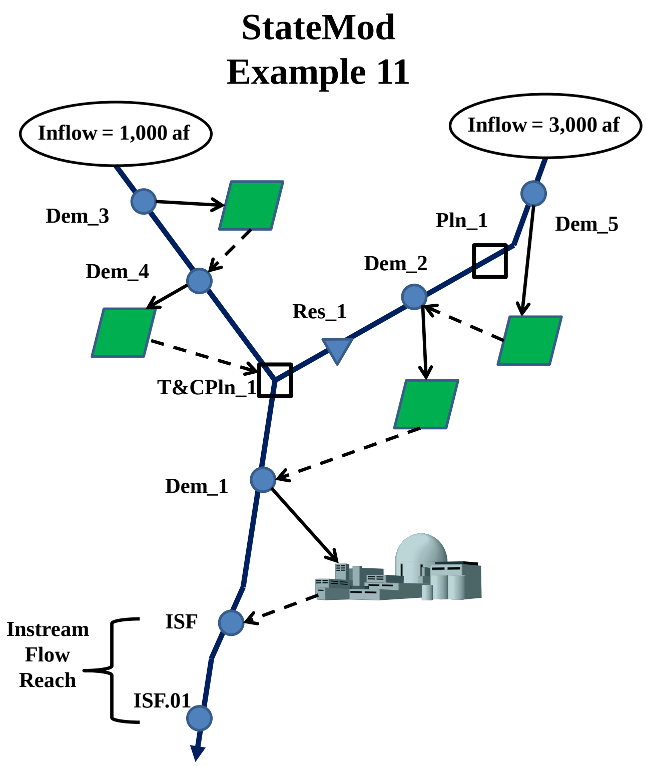
Results:

The results associated with implementing Example 10 are presented in the following files (see Example 10 Data):

1. Water Budget Information (*.xwb). Note the average annual stream inflow is the same as previous examples at 80,000 AF. However the average annual diversion, outflow, and consumptive use have changed to 71,835 AF, 50,074 AF and 27,444 AF respectively.
2. Water Right Information (*.xwr). This file summarizes water right data. Note 1. This file, which is sorted by administration number, indicates that the Pln_1 release to Dem_3 is senior to the Dem_3 direct flow water right, 2. This file also indicates the Pln_1 spill is junior to all other water rights, which is used to ensure no other Plan operations are necessary junior to other water rights. The Dem_2 water right is listed as off since this water right is controlled by Opr_1.
3. Diversion Summary (*.xdd). This file provides a water balance at each river node. The following are noted: 1. The header indicates Dem_3 a direct flow right for 100 cfs. 2. The time series data shows a portion of the demand met by Exc_Pln during the summer months when water is simulated with Opr_1. 3. In April 1980, 357.0 AF is diverted by Exc_Plan and 643.0 AF is diverted from the River by Priority.
4. Plan Summary (*.xpl). This file provides a water balance at each plan node. All of the water supplied to the Plan structure is used by Opr_2, which releases water to Dem_3 by exchange. None of the water is spilled, as shown in the values listed under Use 2.
5. Operational Right Summary (*.xop). This file summarizes the use of water controlled by operating rules. Results indicate the full pro-rata amount of the Dem_2 water right (60 cfs * 10% * 1.9835 = 357.0 AF for 30 dys; 368.9 AF for 31 dys) is exchanged to Pln_1. All of the supplies in Pln_1 are released to Dem_3 and none of the Pln_1 contents are spilled. Note the values presented are the same as those presented in the Plan summary (*.xpl) file.

Example 11

Example 11 is similar to Example 10 except it includes different operations associated with the operating rule that stores a portion of a structure's direct flow right stored in an accounting plan (Pln_1). A second operating rule releases water from this plan to a demand (Dem_4) by exchange and accounts for the terms and conditions (T&C) associated with diverted amounts in a plan (T&CPln_1). The third operating rule releases water from a reservoir (Res_1) to the Terms and Conditions plan. The fourth operating rule spills any unused water from the accounting plan to the river. A schematic of Example 11 is presented below:



Input Data:

Example 11 requires the following input files (see Example 11 Data) that replace or are in addition to those used in Example 10:

1. The response (*.rsp) file describes the input data files and directories where they reside.
2. The river network file (*.rin) includes the Term and Condition plan (T&CPln_1) and reservoir structure (Res_1) added to the river network.
3. The direct diversion file (*.dds) modifies the return flow location for Dem_4 to T&CPln_1.
4. The plan (*.pln) file describes the station characteristics of the accounting plan (Pln_1) and the T&C plan (T&CPlan_1) structures.
5. The plan return flow file (*.prf) identifies the unit response table for the T&C plan structure (T&CPln_1).

6. The operating rule (*.opr) file contains a type 24 operating rule (Opr_1) that exchanges a pro-rata amount (10%) of the Dem_2 direct flow water right (Dem_2_WR_1) into the accounting plan (Pln_1) at administration number 6.00001.
7. The operating rule (*.opr) file contains a type 28 operating rule (Opr_2) that allows a release from the accounting plan (Pln_1) to a destination demand (Dem_4) via release to the river by exchange at administration number 6.00002. In addition, the type 28 rule creates term and condition demands that will need to be replaced. The terms and conditions are calculated on-the-fly and stored under the T&C plan (T&CPln_1) based on simulated diversions and the monthly efficiencies included in the type 28 rule (40 percent).
8. The operating rule (*.opr) file contains a type 48 operating rule (Opr_3) that allows a release from a reservoir (Res_1) to meet the Term and Condition plan (T&CPln_1) demand via the rive at administration number 50.00000.
9. The operating rule (*.opr) file contains a type 29 operating rule (Opr_4) that allows the accounting plan (Pln_1) to spill to the river at administration number 99999.00000. This operating rule is necessary since the accounting plan cannot carry water over subsequent time steps. In addition, when water is spilled the monthly and annual volumetrics included as part of operating rule Opr_1 are adjusted appropriately (e.g. if 100 AF of water are diverted under operating rule Opr_1 and subsequently spilled by operating rule Opr_4, the full monthly and annual limit still remains.

Results:

The results associated with implementing Example 11 are presented in the following files (see Example 11 Data):

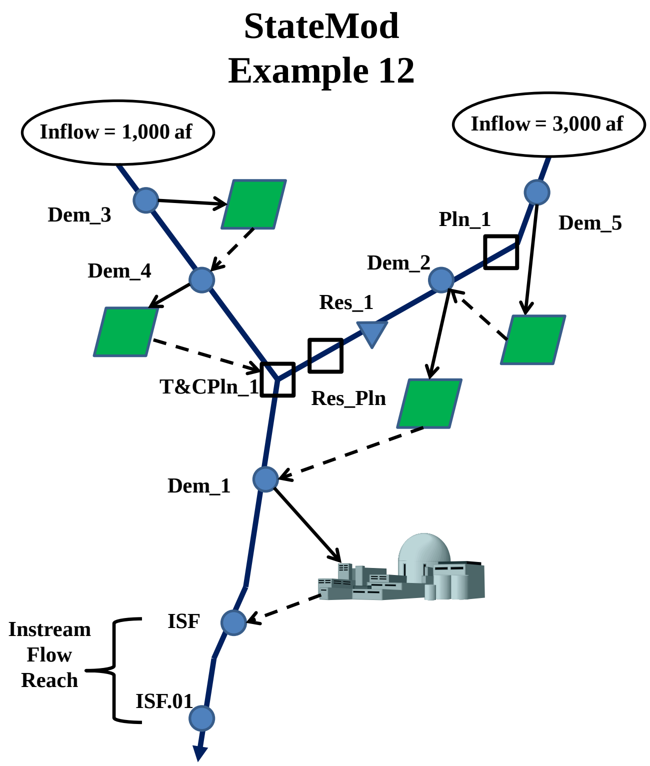
1. Water Budget Information (*.xwb). Note the average annual stream inflow is the same as previous examples at 80,000 AF. However the average annual diversion, outflow, and consumptive use have changed to 73,072 AF, 26,770 AF and 30,700 AF respectively.
2. Water Right Information (*.xwr). This file summarizes water right data. Note 1. This file, which is sorted by administration number, indicates that the Pln_1 release to Dem_4 is senior to the Dem_4 water right. 2. This file also indicates the reservoir releases to meet the T&CPln_1 is junior to all other water rights except for the Pln_1 spill, which is junior to all other water rights. The junior priority for the Plan spill operating rule is used to ensure no other Plan operations are necessary junior to other water rights. The Dem_2 water right is listed as off since this water right is controlled by Opr_1.
3. Diversion Summary (*.xdd). This file provides a water balance at each river node. The following are noted: 1. The header indicates Dem_4 has a direct flow right for 100 cfs. 2. The time series data shows the portion of the demand met by Exc_Pln during the summer months when water is diverted into Pln_1 by operating rule Opr_1. 3. In May 1980, 368.9 AF is diverted by Exc_Plan and 131.1 AF is diverted from the River by Priority.
4. Reservoir Summary (*.xre). This file provides a water balance at each reservoir node. The following are noted: 1. The output is organized by reservoir for the total of all accounts (Account 0) followed by water balances for each of the accounts in the reservoir (Accounts 1 and 2 for Res_1). 2. The reservoir releases to the T&CPln_1 demand with Opr_3 are indicated in the From Storage to River For Use and Total Release for Accounts 0 and 1. The time series show the use of water to meet the T&CPln_1 demand that are the same as presented in the operating rule summary *.xop) file.
5. Plan Summary (*.xpl). This file provides a water balance at each plan node. The following are noted: 1. The header indicates the operating rules associated with Pln_1, which includes the release to Dem_4 and the Plan Spill. 2. The time series show the Supply total associated with

Opr_1. 3. The time series show the use of water released to Dem_4 associated with Opr_2. 4. The time series show the use of water spilled to the river associated with Opr_4 in *.xop file.

6. Plan Summary (*.xpl). The following are noted: 1. The header indicates the operating rules associated with T&CPln_1 include In_priority water and releases from a reservoir (Res_1). Note that the In-Priority source is included because some plans (e.g. an Augmentation Plan) allow water to be supplied by this source. 2. The time series data shows the From Exc/Byp provided by the operating right (Opr_2) supplying water to the destination demand that triggers the T&C Plan demand. 3. The Plan Demand is based on the amount diverted after adjusting for the efficiency of the destination structure (Dem_4), and the unit response table associated with the T&CPln_1 identified in the *prf file. For example, in October 1979, 368.9 AF is diverted by Opr_1 (*.xop file). T&C demands are based on (1 – efficiency in *.opr file) = 368.9 AF * (1 - .40) = 221.34 ac-ft total T&C demand. The unit response table 1 in the *.prf file indicates 50% return in month 1 and month 2. Therefore, the T&CPln_1 demand (*.xpl file) is 110.7 AF in November 1979 (221.34 * 50%). The remaining 110.7 AF T&C demand is owed in November 1979. Subsequent month's diversions and T&C calculations associated with operating rules Opr_1 and Opr_2 would be added (superimposed) to the T&C demands calculated in preceding months. For example, in May 1980 through August 1980. 4. The Plan Demand is met by reservoir releases (Src 2 in *.xpl file) to the T&C Plan demand in operating rule Opr_3.
7. Operational Right Summary (*.xop). This file summarizes the use of water controlled by operating rules. Results indicate the full pro-rata amount of the Dem_2 water right (60 cfs * 10% * 1.9835 = 357.0 AF for 30 dys; 368.9 AF for 31 dys) is exchanged to Dem_4, limited by the Dem_4 demand. Note the values presented for release by the Reservoir (Res_1) to the T&C demand (T&CPln_1) by operating rule Opr_3 are the same as those presented in the Plan summary (*.xpl) file.

Example 12

Example 12 is similar to Example 11 except it contains an operating rule (Opr_1) that stores a portion of a structure's direct flow right in a reservoir (Res_1) as a reusable supply (Res_Pln). A schematic of Example 12 is presented below:



Input Data:

Example 12 requires the following input files (see Example 12 Data) that replace or are in addition to those used in Example 11:

1. The plan (*.pln) file describes the station characteristics of the reservoir plan structure, including the initial storage contents. Note the reservoir reuse plan is assigned a type 8.
2. The operating rule (*.opr) file contains a single type 24 operating rule (Opr_1) that exchanges a pro-rata amount (10%) of the Dem_2 direct flow water right into Res_1, account 2 and the associated reservoir reuse plan (Res_Pln) at administration number 6.00001.

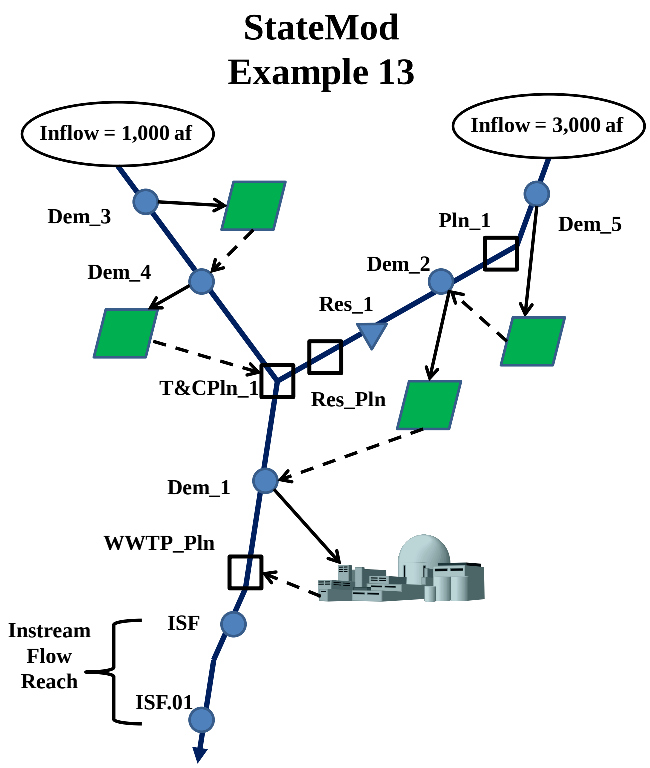
Results:

The results associated with implementing Example 12 are presented in the following files (see Example 12 Data):

1. Water Budget Information (*.xwb). Note the average annual stream inflow is the same as previous examples at 80,000 AF. However the average annual diversion, outflow, and consumptive use have changed to 68,123 AF, 47,522 AF and 29,114 AF respectively.
2. Water Right Information (*.xwr). This file summarizes water right data. Note 1. This file, which is sorted by administration number, indicates that the exchange of the pro-rata Dem_2 water right to storage is just junior to the Dem_2 water right administration number. The Dem_2 water right is actually turned off since its operation is controlled by Opr_1.
3. Diversion Summary (*.xdd). This file provides a water balance at each river node. The time series data for Res_1 shows the portion of the Dem_2 water right that was stored in the reservoir account and Reservoir Reuse Plan (see *.xpl file). The remaining portion of the Dem_2 water right (60 cfs * 90% * 1.9835 = 3213.3 AF for 30 dys; 3320.4 AF for 31 dys) is, by default, available to Dem_2. At times the water is legally available, the Dem_2 demand (3,000 AF) is not limited by the remaining pro-rata amount of its water right.
4. Reservoir Summary (*.xre). This file provides a water balance at each reservoir node. The following are noted: 1. The output is organized by reservoir for the total of all accounts (Account 0) followed by water balances for each of the accounts in the reservoir (Accounts 1 and 2 for Res_1). 2. The reservoir storage to Account 2, coinciding with Opr_1, is indicated in the From River by Exc_Plan.
5. Plan Summary (*.xpl). This file provides a water balance at each plan node. The following are noted: 1. The header indicates the operating rules associated with Res_Pln, which include net evaporation from the reservoir. 2. The time series data shows the Initial Storage for each time step and the Total Supply provided by the operating right supplying water to the plan (Opr_1). 3. The uses of Res_Pln currently includes only evaporation, which matches the evaporation simulated on the Res_1, account 1 in the *.xre file during months when no other water is stored in that account. For example, in April 1980, the Res_Pln evaporation (Use 1 in *.xpl file) is 4.9 AF, which is equivalent to the evaporation for Res_1, Account 2 in the *.xre file. In May 1980, water is stored in Res_1, Account 2 via Opr_1 but water is also stored in both accounts of Res_1 pursuant to the reservoir storage right. Therefore, during May 1980, the evaporation from Res_Pln (6.1 AF) is only a pro-rata portion of the total evaporation from Res_1 (280.8 AF, Account 0).
6. Operational Right Summary (*.xop). This file summarizes the use of water controlled by operating rules. Results indicate 10 percent of the Dem_2 water right (60 cfs * 10% * 1.9835 = 357.0 AF for 30 dys; 368.9 AF for 31 dys) is exchanged to Res_1.

Example 13

Example 13 is similar to Example 12 except a non reservoir reuse Plan structure (WWTP_Pln) has been added. A schematic of Example 13 is presented below



Input Data:

Example 13 requires the following input files (see Example 13 Data) that replace or are in addition to those used in Example 12:

1. The response (*.rsp) file describes the input data files and directories where they reside.
2. The river network file (*.rin) includes a non reservoir reuse plan (WWTP_Pln) structure added to the river network.
3. The direct diversion file (*.dds) modifies the return flow location for Dem_1 to go to WWTP_Pln.
4. The plan (*.pln) file describes the station characteristics of the additional non reservoir reuse plan structure. Note the non reservoir reuse plan is a plan type 3.
5. The operating rule (*.opr) file includes a type 25 operating rule (Opr_1) that allows a pro-rata use (100 percent in this case) of the Dem_1 water right to be diverted by Dem_1 and the unused water (return flows) stored in a non reservoir reuse plan structure (WWTP_Pln) at priority 2.0001.
6. The operating rule (*.opr) file includes a type 29 operating rule that allows the non reservoir reuse plan (WWTP_Pln) to spill to the river at administration number 99999.00000.

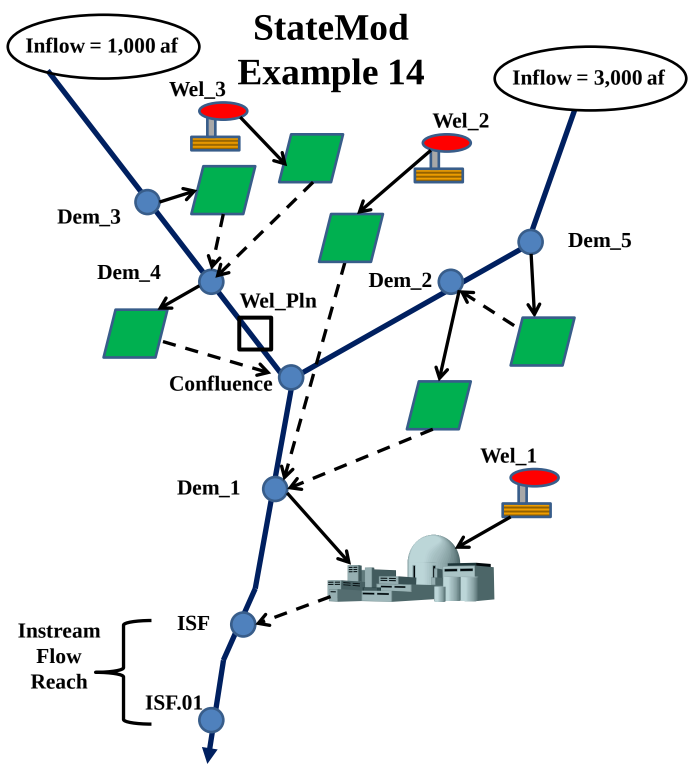
Results:

The results associated with implementing Example 13 are presented in the following files (see Example 13 Data):

1. Water Budget Information (*.xwb). Note the average annual stream inflow is the same as previous examples at 80,000 AF. However the average annual diversion, outflow, and consumptive use have changed to 71,001 AF, 25,650 AF and 30,947 AF respectively. The outflow is reduced due to the reservoir right diversions in the high spring runoff months, as illustrated by reservoir change of 20,803 AF.
2. Water Right Information (*.xwr). This file summarizes water right data. Note 1. This file, which is sorted by administration number, indicates that the pro-rata diversion operating rule (Opr_1) is just senior to the Dem_1 direct flow water right. The Opr_1 administration number is different than the source water right administration number of 2.00000 to help identify the rights as different when reviewing output files. The Dem_1 water right is listed as off since this water right is controlled by Opr_1.
3. Diversion Summary (*.xdd). This file provides a water balance at each river node. The following are noted: 1. The header indicates Dem_1 has a direct flow right for 100 cfs. 2. The time series data shows the portion of the demand met by Exc_Pln every month when Dem_1 water right is in priority. For example, in May 1980, 2,000 AF is diverted by Exc_Plan associated with Opr_1 in the *.xop file.
4. Plan Summary (*.xpl). This file provides a water balance at each plan node. The following are noted: 1. The header indicates the operating rules associated with WWTP_Pln, which includes the storage spill to the river of unused water at the end of each time step. The time series show the Supply total associated with Opr_1 and the unused water from Dem_1. 3. The time series show the use of water spilled to the river associated with Opr_2 in *.xop file. Note that, since Dem_1 has a four-month unit response pattern, the reusable return flows do not reach steady-state until month 4 (Jan 1980).
5. Operational Right Summary (*.xop). This file summarizes the use of water controlled by operating rules. Results indicate the full Dem_1 demand is supplied by Opr_1. Note the values presented for Opr_2 are the same as those presented in the Plan summary (*.xpl) file.

Example 14

Example 14 is similar to Example 7 except a well augmentation Plan structure (Wel_Pln) has been added. A schematic of Example 14 is presented below



Input Data:

Example 14 requires the following input files (see Example 14 Data) that replace or are in addition to those used in Example 7:

1. The response (*.rsp) file describes the input data files and directories where they reside. Note the directory path is used to reference files used in previous examples that do not require revision. The response file includes a plan station (*.pln) and a well plan (*.plw) file.
2. The control (*.ctl) file describes the operational switches and unit conversions. Note: 1. The header cards have been revised to describe the example.
3. The river network file (*.rin) includes a well augmentation plan (Wel_Pln) structure added to the river network.
4. The plan station file (*.pln) contains a well augmentation plan (Wel_Pln).
5. The well plan file (*.plw) that ties pumping from two well rights (Wel_2_Wr#1 and Wel_2_Wr#1) to the well augmentation plan (Wel_Pln).

Results:

The results associated with implementing Example 14 are presented in the following files (see Example 14 Data):

1. Water Budget Information (*.xwb). This file provides a water budget. Note 1. The results are exactly the same as Example 7 because well augmentation requirements (demands) are simulated but have not been satisfied by adding additional operating rules.
2. Water Right Information (*.xwr). This file summarizes water right data. Note 1. The results are exactly the same as Example 7 because well augmentation requirements (demands) are simulated but have not been satisfied by adding additional operating rules.
3. Diversion Summary (*.xdd). The results are exactly the same as Example 7 because well augmentation requirements (demands) are simulated but have not been satisfied by adding additional operating rules.
4. Well Summary (*.xwe). The results are exactly the same as Example 7 because well augmentation requirements (demands) are simulated but have not been satisfied by adding additional operating rules.
5. Ground Water Summary (*.xgw). The results are exactly the same as Example 7 because well augmentation requirements (demands) are simulated but have not been satisfied by adding additional operating rules.
6. Plan Summary (*.xpl). This file summarizes data associated with the well augmentation plan Wel_Pln. As shown in October, 1979 total pumping associated with this plan (well rights Wel_2_Wr#1 and Wel_2_Wr#1) was estimated to equal 922 ac-ft. Also shown for that same time period is a 77 ac-ft depletion associated with that pumping.

Example 1

```
# Exhibit 1.1
# *.rsp; response file for Statemod Example 1
#       This response file lists the StateMod input files necessary for model simulation
#
# Type                                       Name
# __________________________________________  _____________________________
Control                                    = ex1.ctl
River_Network                              = ex1.rin
StreamGage_Station                         = ex1.ris
Stream_Base_Monthly                        = ex1.rim
Diversion_Station                          = ex1.dds
Diversion_Right                            = ex1.ddr
Diversion_Demand_Monthly                   = ex1.ddm
Instreamflow_Station                       = ex1.ifs
Instreamflow_Right                         = ex1.ifr
Instreamflow_Demand_AverageMonthly         = ex1.ifa
DelayTable_Monthly                         = ex1.urm
OutputRequest                              = ex1.out

# Exhibit 1.2
# ex*.ctl;  Control file for StateMod Example 1
#
#
  STATEMOD
  StateMod Operating Rule Example - ex1.* data set
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;    ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;      ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       1     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       6     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       1     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       0     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       0     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       1     : isig    Number of significant digits behind decimal point in output files

# Exhibit 1.3
# *.rin; River node network file for StateMod Example 1
#
# *******************************************************
#
#
#  Card 1   Control
#  format:  (a12, a24, a12, 1x, a12, 1x, f8.0)
#
#  ID           cstaid:  Station ID
#  Name         stanam:  Station name
```

```
#  Downstream   cstadn:  Downstream node ID
#  Comment     comment:  Alternate identifier/comment.
#  GWMax        gwmaxr:  Max recharge limit (cfs) - see iwell in control file.
#
#   ID                Name          DownStream     Comment    GWMax
#---------eb----------------------eb----------exb----------exb------e
Dem_3       Exist. Diver. 3/Inflow  Dem_4
Dem_4       Exist. Diver. 4         Riv_50
Dem_5       Exist. Diver. 5/Inflow  Dem_2
Dem_2       Exist. Diver. 2         Riv_50
Riv_50      Confluence              Dem_1
Dem_1       Exist. Diver. 1         ISF
ISF         Top Instream Flow       ISF.01
ISF.01      Bottom Instream Flow

# Exhibit 1.4
# *.ris; Streamflow station file for StateMod Example 1
#
# *******************************************************
#
#     Card 1   Control
#     format:  (a12, a24, a12, 1x, a12)
#
#  ID         crunid:  Station ID
#  Name       runnam:  Station name
#  River ID    cgoto:  River node with stream gage
#  Daily ID  crunidy:  Daily stream station ID.
#
#    ID              Name           River ID     Daily ID
#---------eb----------------------eb----------exb----------e
Dem_3       Exist. Diver. 3/Inflow  Dem_3        Dem_3
Dem_5       Exist. Diver. 5/Inflow  Dem_5        Dem_5
ISF.01      Bottom Instream Flow    ISF.01       Dem_3

# Exhibit 1.5
# *.rim;  Monthly streamflow file StateMod Example 1
#
# *******************************************************
#
#     Card 1   Control
#     format:  (i4, 1x, a12, 12f8.0)
#
#     Year     iryr:            Year
#     ID       cistat:          Station id
#     runoff(1-12):             Streamflow by month = virinp(im,np) for station np
#
#
#
# Yr ID               Oct     Nov     Dec     Jan     Feb     Mar     Apr     May     Jun     Jul     Aug     Sep
Total
# -e-b----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb----
----e
#
   10/1979  -      9/1980 AF/M  WYR
1980 Dem_3          1000.   1000.   1000.   1000.   1000.   1000.   1000.   5000.   5000.   1000.   1000.   1000.
20000.
1980 Dem_5          3000.   3000.   3000.   3000.   3000.   3000.   3000.  15000.  15000.   3000.   3000.   3000.
60000.
1980 ISF.01         4000.   4000.   4000.   4000.   4000.   4000.   4000.  20000.  20000.   4000.   4000.   4000.
80000.

# Exhibit 1.6
# *.dds;  Direct Diversion Station file for StateMod Example 1
#
#>************************************************
#>  Direct Diversion Station File
#>
#>  Card 1 format (a12, a24, a12, i8, f8.2, 2i8, 1x, a12)
#>
#>  ID          cdivid:  Diversion station ID
#>  Name        divnam:  Diversion name
#>  Riv ID       cgoto:  River node for diversion
#>  On/Off      idivsw:  Switch 0=off, 1=on
#>  Capacity    divcap:  Diversion capacity (CFS)
#>                dumx:  Not currently used
#>  RepType    ireptyp:  Replacement reservoir option (see StateMod doc)
#>  Daily ID   cdividy:  Daily diversion ID
#>
#>  Card 2 format (12x, a24, 12x, 2i8, f8.2, f8.0, 2i8)
#>
#>  User Name  usernam:  User name.
#>  DemType     idvcom:  Demand data type switch (see StateMod doc)
#>  #-Ret         nrtn:  Number of return flow table ref
#>  Eff         divefc:  Annual system efficiency
#>  Area          area:  Irrigated acreage
#>  UseType     irturn:  Use type (see StateMod doc)
#>  Demsrc      demsrc:  Demand source (see StateMod doc)
#>
#>  Card 3 format (free format)
```

```
#>
#>     diveff (12):  System efficiency % by month
#>
#>  Card 4 format (36x, a12, f8.2, i8)
#>
#>  Ret ID      crtnid:  River node receiving return flow
#>  Ret %       pcttot:  Percent of return flow to this river node
#>  Table #     irtndl:  Delay (return flow) table for this return flow.
#>
#> ID              Name             Riv ID     On/Off  Capacity        RepType   Daily ID
#>---------eb----------------------eb---------eb------eb------eb------eb------exb---------e
#>              User Name                            DemType   #-Ret   Eff %   Area  UseType DemSrc
#>xxxxxxxxxxb----------------------exxxxxxxxxxxxb------eb------eb------eb------eb------eb------e
#>          ... Monthly Efficiencies...
#>b----------------------------------------------------------------------e
#>                                   Ret ID       Ret % Table #
#>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxb---------eb------eb------e
Dem_3       Irrigation Demand _3    Dem_3              1 5000.00       1       0  Dem_3
                                                       1       1     50.    0.00       1       0
                                    Dem_4        100.00       1
Dem_4       Irrigation Demand _4    Dem_4              1 5000.00       1       0  Dem_4
                                                       1       1     50.    0.00       1       0
                                    Riv_50       100.00       1
Dem_5       Irrigation Demand _5    Dem_5              1 5000.00       1       0  Dem_5
                                                       1       1     50.    0.00       1       0
                                    Dem_2        100.00       1
Dem_2       Irrigation Demand _2    Dem_2              1 5000.00       1       0  Dem_2
                                                       1       1     50.    0.00       1       0
                                    Dem_1        100.00       1
Dem_1       Municipal Demand _1     Dem_1              1 5000.00       1       0  Dem_1
                                                       1       1     20.    0.00       1       0
                                    ISF          100.00       2

# Exhibit 1.7
# *.ddr;  Direct Diversion Right for StateMod Example 1
#
# *******************************************************
#
#     Card 1   Control
#     format:  (a12, a24, a12, f16.5, f8.2, i8)
#
#     ID       cidvri:  Diversion right ID
#     Name      named:  Diversion right name
#     Struct    cgoto:  Direct Diversion Structure ID associated with this right
#     Admin #   irtem:  Administration number
#                       (small is senior).
#     Decree   dcrdiv:  Decreed amount (cfs)
#     On/Off   idvrsw:  Switch 0 = off, 1 = on
#                       YYYY = on for years >= YYYY.
#                       -YYYY = off for years > YYYY.
#
#   ID            Name              Struct            Admin #   Decree  On/Off
#EndHeader
#---------eb----------------------eb---------eb--------------eb------eb------e
Dem_3_WR_1  Irrigation Demand _3    Dem_3               7.00000  100.00       1
Dem_4_WR_1  Irrigation Demand _4    Dem_4              10.00000  100.00       1
Dem_5_WR_1  Irrigation Demand _5    Dem_5              15.00000  100.00       1
Dem_2_WR_1  Irrigation Demand _2    Dem_2               6.00000   60.00       1
Dem_1_WR_1  M&I Demand _1           Dem_1               2.00000  100.00       1

# Exhibit 1.8
# *.ddm;  Direct Flow Diversion Demands for StateMod Example 1
#
# *******************************************************
#
#     Card 1   Control
#     format:  (i4, 1x, a12, 12f8.0
#
#     Year     idyr:            Year
#     ID       cistat:          Station id
#     diverm(1-12):             Demand for month 1-12 ( ) = diver(im,nu) for station nu
#
#
# Yr ID              Oct     Nov     Dec     Jan     Feb     Mar     Apr     May     Jun     Jul     Aug     Sep
Total
# -e-b----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb----
----e
#
   10/1979  -      9/1980 AF/M  WYR
1980 Dem_3          1000.   1000.   1000.   1000.   1000.   1000.   1000.   1000.   1000.   1000.   1000.   1000.
12000.
1980 Dem_4           500.    500.    500.    500.    500.    500.    500.    500.    500.    500.    500.      0.
5500.
1980 Dem_5             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.
1980 Dem_2          3000.   3000.   3000.   3000.   3000.   3000.   3000.   3000.   3000.   3000.   3000.   3000.
36000.
1980 Dem_1          2000.   2000.   2000.   2000.   2000.   2000.   2000.   2000.   2000.   2000.   2000.   2000.
24000.
```

```
# Exhibit 1.9
# *.ifs; Instream Flow Station file for StateMod Example 1
#
# *******************************************************
#  Instream Flow Station File
#
#  Card1 format:  (a12,a24,a12,i8,1x,a12,1x,a12,i8)
#
#  ID           cifrid:  Instream Flow ID
#  Name         cfrnam:  Instream Flow Name
#  Riv ID        cgoto:  Upstream river ID where instream flow is located
#  On/Off       ifrrsw:  Switch; 0=off, 1=on
#  Downstream   ifrrdn:  Downstream river ID where instream flow is located
#                        (blank indicates downstream=upstream)
#  DailyID     cifridy:  Daily instream flow ID (see StateMod doc)
#  DemandType   iifcom:  Demand type switch (see StateMod doc)
#
# ID        Name                    Riv ID     On/Off   Downstream    DailyID    DemandType
#---------eb----------------------eb----------eb------e-b----------exb----------eb------e
#
ISF         Instream Demand         ISF                1 0                              2

# Exhibit 1.10
# *.ifr; Instream Flow Right file for StateMod Example 1
#
# *******************************************************
#
#     Card 1   Control
#     format:  (a12, a24, a12, F16.5, f8.2, i8)
#
#  ID         cifrri:      Instream flow right ID
#  Name        namei:      Instream flow right name
#  Structure   cgoto:      Instream flow station associated with the right
#  Admin#      irtem:      Priority or Administration number
#                          (small is senior).
#  Decree     dcrifr:      Decreed amount (cfs)
#  On/Off     iifrsw:      Switch 0 = off, 1 = on
#                          YYYY = on for years >= YYYY
#                          -YYYY = off for years > YYYY
#
#   ID           Name              Structure        Admin#     Decree On/Off
#---------eb----------------------eb----------exxxxb----------eb------eb------e
ISF_WR_1    Instream Flow 1         ISF                  9.00000   65.50       1

# Exhibit 1.11
# *.ifa; Annual Instream Flow Demand File for StateMod Example 1
#
# *******************************************************
#
#     Card 1   Control
#     format:  (Free)
#
#     Id       cistat:         Instream ID
#         flowr(1-12):         Instream Flow Demand by month
#
# NA ID               Oct     Nov     Dec     Jan     Feb     Mar     Apr     May     Jun     Jul     Aug     Sep
Average
# -e-b----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb----
----e
#
   10/   0  -      9/   0  CFS  WYR
     ISF             65.5    65.5    65.5    65.5    65.5    65.5    65.5    65.5    65.5    65.5    65.5    65.5
65.5

# Exhibit 1.12
# ex*.urm; Return flow delay table for StateMod Example 1
#
# *******************************************************
#
#     Card 1   Control
#     format:  (16x, i8, 12f8.0)
#
#     ID       idly:           Delay table id
#     Ret      dlyrat(1-n,idl): Return for month n, station idl       Ret1-12 coincides with months in year type in
.ctl file
#
# ID           Ret 1   Ret 2   Ret 3   Ret 4   Ret 5   Ret 6   Ret 7   Ret 8   Ret 9  Ret 10  Ret 11  Ret 12
#----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------e
#
       1 5     50.     50.      0.      0.      0.    Irrigation Return Table
       2 5     40.     30.     20.     10.      0.    M&I Return Table

# Exhibit 1.13
# *.out; Output request file for StateMod Example 1
#
# Type (e.g. Diversion, StreamGage, Reservoir, InstreamFlow, Well or All)
#
```

```
All
#
# Parameter (e.g. Total_Supply, Sim_EOM, River_Outflow or All)
#
All
#
# ID Name Type and Print Code (0=no, 1=yes);
# Note: id = All prints all
#       id = -999 = stop
#       default is to turn on all stream gages (FLO)
#
All
Dem_3       Exist. Diver. 3/Inflow     DIV     1
Dem_4       Exist. Diver. 4            DIV     1
Dem_5       Exist. Diver. 5/Inflow     DIV     1
Dem_2       Exist. Diver. 2            DIV     1
Riv_50      Confluence                 OTH     1
Dem_1       Exist. Diver. 1            DIV     1
ISF         Top Instream Flow          ISF     1
ISF.01      Bottom Instream Flow       ISF     1
-999

#
# ___________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex1.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  8:38: 6
# Time Step:         Monthly
#
# ___________________________________________________________________________________

                               Water Budget  ACFT

               Stream                    From/To      From       From       Total                From River
Well    Reservoir  Reservoir    Stream   Reservoir            To       SoilM
Year   Mo      Inflow      Return      GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change        SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
1979 OCT       4000.0      1306.7         0.0         0.0         0.0      5306.7      4666.7         0.0         0.0
0.0         0.0       640.0         0.0         0.0         0.0      5306.7         0.0      1733.3         0.0
0.0         0.0
 1979 NOV       4000.0      2675.6         0.0         0.0         0.0      6675.6      5555.6         0.0         0.0
0.0         0.0      1120.0         0.0         0.0         0.0      6675.6         0.0      2177.8         0.0
0.0         0.0
 1979 DEC       4000.0      3291.9         0.0         0.0         0.0      7291.9      5851.9         0.0         0.0
0.0         0.0      1440.0         0.0         0.0         0.0      7291.9         0.0      2325.9         0.0
0.0         0.0
 1980 JAN       4000.0      3550.6         0.0         0.0         0.0      7550.6      5950.6         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7550.6         0.0      2375.3         0.0
0.0         0.0
 1980 FEB       4000.0      3583.5         0.0         0.0         0.0      7583.5      5983.5         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7583.5         0.0      2391.8         0.0
0.0         0.0
 1980 MAR       4000.0      3594.5         0.0         0.0         0.0      7594.5      5994.5         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7594.5         0.0      2397.3         0.0
0.0         0.0
 1980 APR       4000.0      3598.2         0.0         0.0         0.0      7598.2      5998.2         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7598.2         0.0      2399.1         0.0
0.0         0.0
 1980 MAY      20000.0      3724.5         0.0         0.0         0.0     23724.5      6500.0         0.0         0.0
0.0         0.0     17224.5         0.0         0.0         0.0     23724.5         0.0      2650.0         0.0
0.0         0.0
 1980 JUN      20000.0      3850.0         0.0         0.0         0.0     23850.0      6500.0         0.0         0.0
0.0         0.0     17350.0         0.0         0.0         0.0     23850.0         0.0      2650.0         0.0
0.0         0.0
 1980 JUL       4000.0      3725.0         0.0         0.0         0.0      7725.0      6000.0         0.0         0.0
0.0         0.0      1725.0         0.0         0.0         0.0      7725.0         0.0      2400.0         0.0
0.0         0.0
 1980 AUG       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
 1980 SEP       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________

 1980 Tot      80000.0     40100.5         0.0         0.0         0.0    120100.5     71000.9         0.0         0.0
0.0         0.0     49099.5         0.0         0.0         0.0    120100.5         0.0     28300.5         0.0
0.0         0.0
                               Water Budget  ACFT
```

```
              Stream                    From/To      From       From       Total                 From River
Well    Reservoir  Reservoir    Stream   Reservoir           To       SoilM
Year   Mo      Inflow      Return      GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change       SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
Ave   OCT       4000.0      1306.7         0.0         0.0         0.0     5306.7      4666.7         0.0         0.0
0.0         0.0       640.0         0.0         0.0         0.0     5306.7         0.0      1733.3         0.0
0.0         0.0
Ave   NOV       4000.0      2675.6         0.0         0.0         0.0     6675.6      5555.6         0.0         0.0
0.0         0.0      1120.0         0.0         0.0         0.0     6675.6         0.0      2177.8         0.0
0.0         0.0
Ave   DEC       4000.0      3291.9         0.0         0.0         0.0     7291.9      5851.9         0.0         0.0
0.0         0.0      1440.0         0.0         0.0         0.0     7291.9         0.0      2325.9         0.0
0.0         0.0
Ave   JAN       4000.0      3550.6         0.0         0.0         0.0     7550.6      5950.6         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0     7550.6         0.0      2375.3         0.0
0.0         0.0
Ave   FEB       4000.0      3583.5         0.0         0.0         0.0     7583.5      5983.5         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0     7583.5         0.0      2391.8         0.0
0.0         0.0
Ave   MAR       4000.0      3594.5         0.0         0.0         0.0     7594.5      5994.5         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0     7594.5         0.0      2397.3         0.0
0.0         0.0
Ave   APR       4000.0      3598.2         0.0         0.0         0.0     7598.2      5998.2         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0     7598.2         0.0      2399.1         0.0
0.0         0.0
Ave   MAY      20000.0      3724.5         0.0         0.0         0.0    23724.5      6500.0         0.0         0.0
0.0         0.0     17224.5         0.0         0.0         0.0    23724.5         0.0      2650.0         0.0
0.0         0.0
Ave   JUN      20000.0      3850.0         0.0         0.0         0.0    23850.0      6500.0         0.0         0.0
0.0         0.0     17350.0         0.0         0.0         0.0    23850.0         0.0      2650.0         0.0
0.0         0.0
Ave   JUL       4000.0      3725.0         0.0         0.0         0.0     7725.0      6000.0         0.0         0.0
0.0         0.0      1725.0         0.0         0.0         0.0     7725.0         0.0      2400.0         0.0
0.0         0.0
Ave   AUG       4000.0      3600.0         0.0         0.0         0.0     7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0     7600.0         0.0      2400.0         0.0
0.0         0.0
Ave   SEP       4000.0      3600.0         0.0         0.0         0.0     7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0     7600.0         0.0      2400.0         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
Ave   Tot      80000.0     40100.5         0.0         0.0         0.0   120100.5     71000.9         0.0         0.0
0.0         0.0     49099.5         0.0         0.0         0.0   120100.5         0.0     28300.5         0.0
0.0         0.0
                                                                                              0.0 (6)
                                                                                       ___________
                                                                                           71000.9
  Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency
             + max (Resevoir Evaporation (Evap), 0.0).
        (2) Loss is not part of the Stream Water Balance.
            It is the portion of a diversion, well pumping
            and reservoir seepage that does not return to
            the stream
        (3) Pumping is not part of the Stream Balance.
            Its impact on the stream is included in the From River by Well and Well Depletion columns
        (4) Salvage is not part of the Stream Water Balance.
            It is the portion of well pumping that does not impact the stream
        (5) From Plan is water from a reuse plan.
        (6) Divert does not include diversions by an
            instream flow or a T&C plan. Also to avoid
            double accounting with reservoir storage it has
            reduced by:
              1       0. af/yr for Diverted to Storage.
              2       0. af/yr for a Diversion Carrier.
              3       0. af/yr for a Reservior Carrier.
              4       0. af/yr for a Plan Carrier.
                      0. af/yr Total

#
# ________________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex1.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  8:38: 9
# Time Step:         Monthly
#
# ________________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =          6
```

```
#
#
________________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
            operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID               Type         Admin #  On/Off  Str ID #1    Str ID #2           Amount Right Name
Str Name #1               Str Name #2
#    (1) (2)               (3)             (4)     (5)  (6)          (7)                    (8) (9)
(10)                       (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

       1 Dem_1_WR_1          3        2.00000       1  Dem_1        -1              100.000 c M&I Demand _1
Municipal Demand _1
       2 Dem_2_WR_1          3        6.00000       1  Dem_2        -1               60.000 c Irrigation Demand _2
Irrigation Demand _2
       3 Dem_3_WR_1          3        7.00000       1  Dem_3        -1              100.000 c Irrigation Demand _3
Irrigation Demand _3
       4 ISF_WR_1            1        9.00000       1  ISF          -1               65.500 c Instream Flow 1
Instream Demand
       5 Dem_4_WR_1          3       10.00000       1  Dem_4        -1              100.000 c Irrigation Demand _4
Irrigation Demand _4
       6 Dem_5_WR_1          3       15.00000       1  Dem_5        -1              100.000 c Irrigation Demand _5
Irrigation Demand _5

#
# ________________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex1.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  8:37:44
# Time Step:         Monthly
#
# ________________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex1.* data set
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand               From River By                      From Carrier By
Carried                 ============= ==============================
```

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Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3        1979  OCT  1000.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  1000.0   500.0     0.0     0.0     0.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
0.0     0.0  1000.0     0.0 Dem_1           100.000
Dem_3       Dem_3        1979  NOV  1000.0   500.0   555.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   555.6   444.4   222.2   277.8     0.0   277.8     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
555.6     0.0   444.4     0.0 Dem_1           100.000
Dem_3       Dem_3        1979  DEC  1000.0   500.0   851.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   851.9   148.1    74.1   425.9     0.0   425.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
851.9     0.0   148.1     0.0 Dem_1           100.000
Dem_3       Dem_3        1980  JAN  1000.0   500.0   950.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   950.6    49.4    24.7   475.3     0.0   475.3     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
950.6     0.0    49.4     0.0 Dem_1           100.000
Dem_3       Dem_3        1980  FEB  1000.0   500.0   983.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   983.5    16.5     8.2   491.8     0.0   491.8     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
983.5     0.0    16.5     0.0 Dem_1           100.000
Dem_3       Dem_3        1980  MAR  1000.0   500.0   994.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   994.5     5.5     2.7   497.3     0.0   497.3     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
994.5     0.0     5.5     0.0 Dem_1           100.000
Dem_3       Dem_3        1980  APR  1000.0   500.0   998.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   998.2     1.8     0.9   499.1     0.0   499.1     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
998.2     0.0     1.8     0.0 Dem_1           100.000
Dem_3       Dem_3        1980  MAY  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  3999.5 NA                  -1.000
Dem_3       Dem_3        1980  JUN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  4000.0 NA                  -1.000
Dem_3       Dem_3        1980  JUL  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  AUG  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  SEP  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1           100.000
___________ __________  _____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_3       Dem_3        1980  TOT 12000.0  6000.0 10334.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 10334.2  1665.8   832.9  5167.1     0.0  5167.1     0.0     0.0 20000.0     0.0     0.0     0.0 20000.0
10334.2     0.0  9665.8  7999.5 NA                  -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex1.* data set
PAGE NO.   2

    STRUCTURE ID (0 = total)  : Dem_4              2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4        Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4        Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                      Demand              From River By                  From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_4       Dem_4        1979  OCT   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0  1000.0     0.0     0.0     0.0     0.0  1000.0
0.0     0.0  1000.0     0.0 Dem_1           100.000
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Dem_4       Dem_4       1979  NOV   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   444.4     0.0   138.9     0.0     0.0   583.3
0.0     0.0   583.3     0.0 Dem_1           100.000
Dem_4       Dem_4       1979  DEC   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   148.1     0.0   351.9     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  JAN   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    49.4     0.0   450.6     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  FEB   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    16.5     0.0   483.5     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  MAR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     5.5     0.0   494.5     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  APR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     1.8     0.0   498.2     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  MAY   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   499.5     0.0     0.0  4499.5
500.0     0.0  3999.5  3999.5 NA               -1.000
Dem_4       Dem_4       1980  JUN   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  4000.0 NA               -1.000
Dem_4       Dem_4       1980  JUL   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  AUG   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_4       Dem_4       1980  TOT  5500.0  2750.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0  4500.0  2250.0   500.0     0.0   500.0     0.0  9665.8     0.0  4917.1     0.0     0.0 14582.9
1000.0     0.0 13582.9  7999.5 NA                -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex1.* data set
PAGE NO.   3

    STRUCTURE ID (0 = total)  : Dem_5              -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
=================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
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Dem_5       Dem_5       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 12000.0 NA               -1.000
Dem_5       Dem_5       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 12000.0 NA               -1.000
Dem_5       Dem_5       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_5       Dem_5       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0 24000.0 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex1.* data set
PAGE NO.   4

    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2        Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2        Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                         Demand              From River By                   From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                 Station Balance
====================================== ========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2       1979  OCT  3000.0  1500.0  2666.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2666.7   333.3   166.7  1333.3     0.0  1333.3     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2666.7     0.0   333.3     0.0 Dem_1            100.000
Dem_2       Dem_2       1979  NOV  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1979  DEC  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  JAN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  FEB  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  MAR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  APR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  MAY  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0 12000.0 NA               -1.000
Dem_2       Dem_2       1980  JUN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0 12000.0 NA               -1.000
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Dem_2       Dem_2       1980  JUL  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  AUG  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  SEP  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_2       Dem_2       1980  TOT 36000.0 18000.0 35666.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 35666.7   333.3   166.7 17833.3     0.0 17833.3     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
35666.7     0.0 24333.3 24000.0 NA               -1.000

    Gage  Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex1.* data set
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    RIVER LOCATION - FROM     : Riv_50       Confluence
    RIVER LOCATION - TO       : Riv_50       Confluence



Shortage                 Water Use
                                           Demand              From River By                   From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To     Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                               Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
NA          Riv_50      1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1333.3     0.0     0.0     0.0     0.0  1333.3
0.0     0.0  1333.3     0.0 NA               -1.000
NA          Riv_50      1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   583.3     0.0     0.0     0.0     0.0   583.3
0.0     0.0   583.3     0.0 NA               -1.000
NA          Riv_50      1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50      1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50      1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50      1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50      1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50      1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15999.5     0.0   125.0     0.0     0.0 16124.5
0.0     0.0 16124.5 13197.0 NA               -1.000
NA          Riv_50      1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 16000.0     0.0   250.0     0.0     0.0 16250.0
0.0     0.0 16250.0 13452.4 NA               -1.000
NA          Riv_50      1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0   125.0     0.0     0.0   625.0
0.0     0.0   625.0     0.0 NA               -1.000
NA          Riv_50      1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50      1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
NA          Riv_50      1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 37916.2     0.0   500.0     0.0     0.0 38416.2
0.0     0.0 38416.2 26649.5 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex1.* data set
PAGE NO.   6

    STRUCTURE ID (0 = total)  : Dem_1              5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
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    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :      #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :      1     5000.   297525.   307442.
      Diversion Rights        :      1      100.     5950.     6149.
      Well Capacity           :      1        0.        0.        0.
      Well Rights             :      0        0.        0.        0.


Shortage                 Water Use
                                        Demand              From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    ====================
Exchange  From  Total   Total    CU           To    Total          Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                               Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River    Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1       1979  OCT  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1333.3     0.0   666.7     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1       1979  NOV  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   583.3     0.0  1416.7     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1       1979  DEC  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1       1980  JAN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1       1980  FEB  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1       1980  MAR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1       1980  APR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1       1980  MAY  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0 16124.5     0.0  1500.0     0.0     0.0 17624.5
2000.0     0.0 15624.5 13197.0 NA                -1.000
Dem_1       Dem_1       1980  JUN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0 16250.0     0.0  1500.0     0.0     0.0 17750.0
2000.0     0.0 15750.0 13452.4 NA                -1.000
Dem_1       Dem_1       1980  JUL  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   625.0     0.0  1500.0     0.0     0.0  2125.0
2000.0     0.0   125.0     0.0 NA                -1.000
Dem_1       Dem_1       1980  AUG  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1       1980  SEP  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_1       Dem_1       1980  TOT 24000.0  4800.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 24000.0     0.0     0.0  4800.0     0.0 19200.0     0.0 38416.2     0.0 17083.3     0.0     0.0 55499.5
24000.0     0.0 31499.5 26649.5 NA                -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex1.* data set
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    STRUCTURE ID (0 = total)  : ISF              5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF          Top Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


    STRUCTURE DATA            :      #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :      1        0.        0.        0.
      Diversion Rights        :      1       66.     3898.     4027.
      Well Capacity           :      1        0.        0.        0.
      Well Rights             :      0        0.        0.        0.
```

```
Shortage                 Water Use
                                        Demand               From River By                     From Carrier By
Carried                ============== ==============================
Structure   River                    ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF         1979  OCT  4027.5     0.0  640.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   640.0  3387.5    0.0     0.0     0.0  640.0     0.0     0.0     0.0   640.0     0.0     0.0   640.0
640.0    0.0   640.0     0.0 Hgate_Limit       -1.000
ISF         ISF         1979  NOV  3897.6     0.0  1120.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1120.0  2777.6    0.0     0.0     0.0  1120.0    0.0     0.0     0.0  1120.0     0.0     0.0  1120.0
1120.0    0.0  1120.0     0.0 Hgate_Limit       -1.000
ISF         ISF         1979  DEC  4027.5     0.0  1440.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1440.0  2587.5    0.0     0.0     0.0  1440.0    0.0     0.0     0.0  1440.0     0.0     0.0  1440.0
1440.0    0.0  1440.0     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  JAN  4027.5     0.0  1600.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5    0.0     0.0     0.0  1600.0    0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0    0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  FEB  3637.7     0.0  1600.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2037.7    0.0     0.0     0.0  1600.0    0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0    0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  MAR  4027.5     0.0  1600.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5    0.0     0.0     0.0  1600.0    0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0    0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  APR  3897.6     0.0  1600.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2297.6    0.0     0.0     0.0  1600.0    0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0    0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  MAY  4027.5     0.0  4027.5    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0    0.0     0.0     0.0  4027.5    0.0 15624.5     0.0  1600.0     0.0     0.0 17224.5
4027.5    0.0 17224.5 13197.0 NA                -1.000
ISF         ISF         1980  JUN  3897.6     0.0  3897.6    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0    0.0     0.0     0.0  3897.6    0.0 15750.0     0.0  1600.0     0.0     0.0 17350.0
3897.6    0.0 17350.0 13452.4 NA                -1.000
ISF         ISF         1980  JUL  4027.5     0.0  1725.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1725.0  2302.5    0.0     0.0     0.0  1725.0    0.0   125.0     0.0  1600.0     0.0     0.0  1725.0
1725.0    0.0  1725.0     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  AUG  4027.5     0.0  1600.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5    0.0     0.0     0.0  1600.0    0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0    0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  SEP  3897.6     0.0  1600.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2297.6    0.0     0.0     0.0  1600.0    0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0    0.0  1600.0     0.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
ISF         ISF         1980  TOT 47420.5     0.0 22450.1    0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 22450.1 24970.5    0.0     0.0     0.0 22450.1    0.0 31499.5     0.0 17600.0     0.0     0.0 49099.5
22450.1    0.0 49099.5 26649.5 NA                -1.000

   Diversion Summary  ACFT
     STATEMOD
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    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Bottom Instream Flow
    RIVER LOCATION - FROM     : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


Shortage                 Water Use
                                        Demand               From River By                     From Carrier By
Carried                ============== ==============================
Structure   River                    ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01      1979  OCT      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0    0.0   640.0     0.0     0.0     0.0     0.0   640.0
0.0     0.0   640.0     0.0 NA              -1.000
Baseflow    ISF.01      1979  NOV      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0    0.0  1120.0     0.0     0.0     0.0     0.0  1120.0
0.0     0.0  1120.0     0.0 NA              -1.000
```

```
Baseflow    ISF.01       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1440.0     0.0     0.0     0.0     0.0  1440.0
0.0     0.0  1440.0     0.0 NA               -1.000
Baseflow    ISF.01       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA               -1.000
Baseflow    ISF.01       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA               -1.000
Baseflow    ISF.01       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA               -1.000
Baseflow    ISF.01       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA               -1.000
Baseflow    ISF.01       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 17224.5     0.0     0.0     0.0     0.0 17224.5
0.0     0.0 17224.5 13197.0 NA               -1.000
Baseflow    ISF.01       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 17350.0     0.0     0.0     0.0     0.0 17350.0
0.0     0.0 17350.0 13452.4 NA               -1.000
Baseflow    ISF.01       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1725.0     0.0     0.0     0.0     0.0  1725.0
0.0     0.0  1725.0     0.0 NA               -1.000
Baseflow    ISF.01       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA               -1.000
Baseflow    ISF.01       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Baseflow    ISF.01       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 49099.5     0.0     0.0     0.0     0.0 49099.5
0.0     0.0 49099.5 26649.5 NA               -1.000
```

---

cdssnews@state.co.us
Last updated: September 2008

Example 2

```
# Exhibit 2.1
# *.rsp; response file for Statemod Example 2
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                     Name
# _______________________________________  _____________________________
Control                                  = ex2.ctl
River_Network                            = ex2.rin
StreamGage_Station                       = ..\ex1\ex1.ris
Stream_Base_Monthly                      = ..\ex1\ex1.rim
Diversion_Station                        = ..\ex1\ex1.dds
Diversion_Right                          = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                 = ..\ex1\ex1.ddm
Reservoir_Station                        = ex2.res
Reservoir_Right                          = ex2.rer
Reservoir_Target_Monthly                 = ex2.tam
Evaporation_Monthly                      = ex2.eva
Instreamflow_Station                     = ..\ex1\ex1.ifs
Instreamflow_Right                       = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly       = ..\ex1\ex1.ifa
Operational_Right                        = ex2.opr
DelayTable_Monthly                       = ..\ex1\ex1.urm
OutputRequest                            = ex2.out
```

```
# Exhibit 2.2
# ex*.ctl;  Control file for StateMod Example 2
#
#
  STATEMOD
  StateMod Operating Rule Example - ex2.* data set
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;    ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;      ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       1     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       6     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       1     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       0     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       0     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       1     : isig    Number of significant digits behind decimal point in output files

# Exhibit 2.3
# *.rin; River node network file for StateMod Example 2
#
# *******************************************************
#
#
#  Card 1   Control
#  format:  (a12, a24, a12, 1x, a12, 1x, f8.0)
#
#  ID           cstaid:  Station ID
#  Name         stanam:  Station name
#  Downstream   cstadn:  Downstream node ID
#  Comment     comment:  Alternate identifier/comment.
#  GWMax        gwmaxr:  Max recharge limit (cfs) - see iwell in control file.
#
#   ID                 Name           DownStream     Comment    GWMax
#---------eb----------------------eb----------exb----------exb------e
Dem_3       Exist. Diver. 3/Inflow  Dem_4
Dem_4       Exist. Diver. 4         Riv_50
Dem_5       Exist. Diver. 5/Inflow  Res_1
Res_1       Exist. Reservoir        Dem_2
Dem_2       Exist. Diver. 2         Riv_50
Riv_50      Confluence              Dem_1
Dem_1       Exist. Diver. 1         ISF
ISF         Top Instream Flow       ISF.01
ISF.01      Bottom Instream Flow

# Exhibit 2.4
# *.res; Reservoir station file for StateMod Example 2
#
# *************************************************************
#
#     Card 1   Control (RESSTA)
#     format:  (a12, a24, a12, i8, f8.0)
#
#     ID       cresid:  Reservoir Id
#     Name     resnam:  Reservoir name
#     Riv ID   cgoto:   Node where Reservoir is located
#     On/Off   iressw:  Switch 0 = off, 1 = on
#     Adim Dat rdate:   Administration date for 1 fill rule
#     DailyX   cresidy; for daily model, ID of station with daily data
#
# ID       Name                     Riv ID      On/Off  Adim Dat DailyX
#---------eb----------------------eb----------eb------eb------exb----------e
#
# *************************************************************
#     Card 2   Control (cont.)
#     format:  (24x, 4f8.0, 4i8)
#
#     Minimum  Vol   volmin:  Min storage (ac-ft)
#     Maximum  volmax:  Max storage (ac-ft)
```

```
#     Dischrg  flomax:  Max discharge (cfs)
#     DeadSt   deadst:  Dead storage (ac-ft)
#     # Owner  nowner:  Number of owners
#     # Eva    nevapo:  Number of evaporation Stations
#     # Pre    nprecp:  Number of precipitation Stations
#     # Table  nrange:  Number of area capacity curves (min=10)
#
# NA                     Minimum Maximum Dischrg  DeadSt # Owner   # Eva   # Pre # Table
#----------------------eb------eb------eb------eb------eb------eb------eb------eb------e
#
# *************************************************************
#
#     Card 3   Ownership
#     format:  (24x, 3f8.0, i8)
#
#     Ownmax   Ownmax:  Maximum storage for that owner (ac-ft)
#     Sto-1    curown:  Initial stroage for that owner (ac-ft)
#     Evp Typ  pcteva:  Enter 0; prorate evaporation based on current storage
#     Fill #   n2own:   Ownership type 1=First fill; 2=Second fill
#
# NA                      Ownmax   Sto-1 Evp Typ  Fill #
#----------------------eb------eb------eb------eb------e
#
# *************************************************************
#
#     Card 4   Evaporation (EVAP)
#     format:  (24x, 10(a12,f8.0))
#
#     Evp ID   cevar:  Evaporation station
#     Evp %    weigev:  Evaporation station weight (%)
#
# NA                    Evp Id         Evp % Evp ID        Evp %
#----------------------eb----------eb------eb----------eb------e
#
# *************************************************************
#
#     Card 5   Precipitation (PREC)
#     format:  (8x, i8, 4f8.0)
#
#     Pre ID   cprer:   Precipitatoin station
#     Pre %    weigpr:  Precipitation station weight (%)
#
# NA                    Pre Id         Pre % Pre ID        Pre %
#----------------------eb----------eb------eb----------eb------e
#
# *************************************************************
#
#     Card 6   Area Capacity (SACURV)
#     format:  (24x, 8f8.2)
#     !!!      Minimum of 11 entries
#
#     Cont     conten:  Content (ac-ft)
#     Area     suarea:  Area (ac)
#
# NA                    Cont    Area    Cont    Area
#----------------------eb------eb------eb------eb------e
#
# *************************************************************
#
#     Card 7   Seepage (SEEP)
#     format:  (16x, 8f8.2)
#     !!!      Minimum of 11 entries
#
#     Cont     sepcon:  Content (ac-ft)
#     Seep     seepage: Sepage rate (ac-ft/mo)
#
# NA                    Cont    Seep    Cont    Seep
#----------------------eb------eb------eb------eb------e
#
# *************************************************************
#
#     Format Summary
#
# ID       Name                    Riv ID      On/Off  Adim Dat
# NA                     Minimum Maximum Dischrg  DeadSt # Owner   # Eva   # Pre # Table
# NA                      Ownmax   Sto-1 Evp Typ  Fill #
# NA                    Evp Id         Evp % Evp ID        Evp %
# NA                    Pre Id         Pre % Pre ID        Pre %
#
Res_1       Reservoir_1             Res_1             1     11. 3
            Control           0. 100000. 999999.      0.       2       1       1      10
            Res_1 Own_1   50000.  49975.      0.
            Res_1 Own_2   50000.     25.      0.
            Evap        5001            100.
            Precip      5001            100.
            Cap/Area/Sep      0.      0.      0.
            Cap/Area/Sep  20000.    639.      0.
            Cap/Area/Sep  30000.    846.      0.
            Cap/Area/Sep  40000.   1061.      0.
```

```
            Cap/Area/Sep  50000.   1274.      0.
            Cap/Area/Sep  60000.   1451.      0.
            Cap/Area/Sep  70000.   1603.      0.
            Cap/Area/Sep  80000.   1742.      0.
            Cap/Area/Sep  90000.   1870.      0.
            Cap/Area/Sep 100000.   2023.      0.

# Exhibit 2.5
# ex*.rer;  Reservoir rights file for StateMod Example 2
#
# *******************************************************
#
#    Card 1   Control
#     format:  (a12, a24, a12,4x,f12.5,i8, f8.0, 8i8)
#
#     ID       cirsid:          Reservoir right ID
#     Name     namer:           Reservoir name
#     Struct   cgoto:           Reservoir ID associated with this right
#     Admin #  irtem:           Priority or administration Number (smaller is most senoir)
#     Right    dcrres(k):       Storage right (af)
#     On/Off   irsrsw(k):       Switch 0 = off,1 = on
#     Owner    iresco(2,k):     Ownership code (Enter a negative if ownership goes to the first (n) accounts
#     Type     ityrsr(k):       Reservoir type 1= onstream; 2=off channel served by a carrier
#     Fill #   n2fill(k):       Right type 1=First fill, 2=Second fill
#
# ID        Name                    Struct              Admin #   Right  On/Off   Owner    Type  Fill #
#---------eb----------------------eb----------exxxxb----------eb------eb------eb------eb------eb------e
#
Res_1_WR_1  Reservoir_1             Res_1              15.00000 100000.       1      -2       1       1

# Exhibit 2.6
# *.tam;  Minimum and Maximum Target content data for StateMod Example 2
#
# Yr ID               Oct     Nov     Dec     Jan     Feb     Mar     Apr     May     Jun     Jul     Aug     Sep
Total
# -e-b----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb----
----e
   10/1979  -      9/1980 ACFT  WYR
1980 Res_1            0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1980 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.

# Exhibit 2.6
# *.tam;  Minimum and Maximum Target content data for StateMod Example 2
#
# Yr ID               Oct     Nov     Dec     Jan     Feb     Mar     Apr     May     Jun     Jul     Aug     Sep
Total
# -e-b----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb----
----e
   10/1979  -      9/1980 ACFT  WYR
1980 Res_1            0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
1980 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.

# Exhibit 2.7
# *.eva; Evaporation data for StateMod Example 2
#
# *******************************************************
#
#     Card 1   Control
#     format:  (i4,1x,a12,12f8.0)
#
#     Yr       iery:             Year
#     Id       ceva:             station id
#     evaprt(1-12,ieva):         Evap for month 1-12 (ft)
#
#
# Yr ID               Oct     Nov     Dec     Jan     Feb     Mar     Apr     May     Jun     Jul     Aug     Sep
Total
# -e-b----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb----
----e
#
   10/1979  -      9/1980 AF/M  WYR
1980 5001           0.00    0.00    0.00    0.00    0.00    0.01    0.13    0.11    0.26    0.15    0.12    0.10
EVAP

# Exhibit 2.8
# *.opr; operating rules file for Statemod Example 2
#      This file lists the operating rules used in model simulation
#
#
#                GUIDE TO COLUMN ENTRIES
#     ========================================
#        ID         ID number of operating rule that is used to separate operating rule output in *.xop file
#        Name       Name of operating rule - used for descriptive purposes only
#        Admin#     Administration number used to determine priority of operational water rights relative to other
operations and direct diversion, reservoir, instream flow, and well rights (see tabulation in *.xwr file)
#        # Str      Number of carrier structures, monthly on/off switches, or monthly volumetrics (flag telling
StateMod program the number of entries on next line)
#        On/Off     1 for ON and 0 for OFF
#        Dest ID    Destination of operating rule whose demand is to be met by simulating the operating rule
```

```
#       Dest Ac    Account at destination to be met by operating rule - typically 1 for a diversion structure and
account number for reservoir destination
#       Sou1 ID    ID number of primary source of water under which water right is being diverted in operating rule -
typically a water right, reservoir, or Plan structure
#       Sou1 Ac    Account of Sou1 - typically 1 for a diversion structure and account number for reservoir source
#       Sou2 ID    ID of Plan where reusable storage water or reusable ditch credits is accounted
#       Sou2 Ac    Percentage of Plan supplies available for operation
#       Type       Rule type corresponding with definitions in Chapter 4 of StateMod documentation

#       ReusePlan  ID of Plan where reusable return flows or diversions to storage are accounted

#       Div Type   'Diversion' indicates pro-rata diversion of source water right priority or exchange of reusable
credits to Dest1
#                   'Depletion' indicates pro-rata diversion of source water right priority consumptive use or
augmentation of upstream diversions at Dest1
#       OprLoss    Percentage of simulated diversion lost in carrier ditch (only applies to certain rules - see
StateMod documentation, Section 4.13)
#       Limit      Capacity limit for carrier structures different from capacity in .dds file (used to represent
constricted conveyance capacity for winter deliveries to reservoirs)
#       Comments   Description of rule type
#
# ID        Name                    NA                    Admin#   # Str  On/Off Dest Id     Dest Ac  Sou1 Id     Sou1
Ac  Sou2 Id     Sou2 Ac     Type ReusePlan    Div Type      OprLoss   Limit Comments
# ---------eb----------------------eb----------exxxxb----------eb------eb------e-b----------eb------e-b----------eb---
---e-b----------eb------eb------exb----------exb----------exb------eb------exb----------
Opr_1       Opr_Res_1_to_Target                         10.00000      0.       1 0                  0 Res_1
0 0                 0       9  NA           Diversion           0       0       0    9999 Reservoir Release to Target
```

```
# Exhibit 2.9
# *.out; Output request file for StateMod Example 2
#
# Type (e.g. Diversion, StreamGage, Reservoir, InstreamFlow, Well or All)
#
All
#
# Parameter (e.g. Total_Supply, Sim_EOM, River_Outflow or All)
#
All
#
# ID Name Type and Print Code (0=no, 1=yes);
# Note: id = All prints all
#       id = -999 = stop
#       default is to turn on all stream gages (FLO)
#
All
Dem_3       Exist. Diver. 3/Inflow     DIV     1
Dem_4       Exist. Diver. 4            DIV     1
Dem_5       Exist. Diver. 5/Inflow     DIV     1
Res_1       Exist. Reservoir           RES     1
Dem_2       Exist. Diver. 2            DIV     1
Riv_50      Confluence                 OTH     1
Dem_1       Exist. Diver. 1            DIV     1
ISF         Top Instream Flow          ISF     1
ISF.01      Bottom Instream Flow       ISF     1
-999
```

```
#
# ________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex2.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  9:17: 7
# Time Step:         Monthly
#
# ________________________________________________________________________________

                              Water Budget  ACFT

               Stream                     From/To      From       From       Total                 From River
Well    Reservoir  Reservoir    Stream   Reservoir           To       SoilM
Year   Mo      Inflow      Return      GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change        SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
1979 OCT       4000.0      1306.7          0.0          0.0          0.0      5306.7      4666.7          0.0          0.0
0.0         0.0       640.0          0.0          0.0          0.0      5306.7          0.0      1733.3          0.0
0.0         0.0
 1979 NOV       4000.0      2675.6          0.0          0.0          0.0      6675.6      5555.6          0.0          0.0
0.0         0.0      1120.0          0.0          0.0          0.0      6675.6          0.0      2177.8          0.0
0.0         0.0
 1979 DEC       4000.0      3291.9          0.0          0.0          0.0      7291.9      5851.9          0.0          0.0
0.0         0.0      1440.0          0.0          0.0          0.0      7291.9          0.0      2325.9          0.0
0.0         0.0
```

```
 1980 JAN      4000.0     3550.6         0.0         0.0         0.0     7550.6     5950.6         0.0         0.0
0.0         0.0     1600.0         0.0         0.0         0.0     7550.6         0.0     2375.3         0.0
0.0         0.0
 1980 FEB      4000.0     3583.5         0.0         0.0         0.0     7583.5     5983.5         0.0         0.0
0.0         0.0     1600.0         0.0         0.0         0.0     7583.5         0.0     2391.8         0.0
0.0         0.0
 1980 MAR      4000.0     3594.5         0.0         0.0         0.0     7594.5     5994.5         0.0         0.0
25.3         0.0     1600.0       -25.3         0.0         0.0     7594.5         0.0     2422.5         0.0
0.0         0.0
 1980 APR      4000.0     3598.2         0.0         0.0         0.0     7598.2     5998.2         0.0         0.0
328.4         0.0     1600.0      -328.4         0.0         0.0     7598.2         0.0     2727.5         0.0
0.0         0.0
 1980 MAY     20000.0     3724.5         0.0         0.0         0.0    23724.5     6500.0         0.0         0.0
299.2         0.0     5224.5     11700.8         0.0         0.0    23724.5         0.0     2949.2         0.0
0.0         0.0
 1980 JUN     20000.0     3850.0         0.0         0.0         0.0    23850.0     6500.0         0.0         0.0
804.8         0.0     5350.0     11195.2         0.0         0.0    23850.0         0.0     3454.8         0.0
0.0         0.0
 1980 JUL      4000.0     3725.0         0.0         0.0         0.0     7725.0     6000.0         0.0         0.0
487.4         0.0     1725.0      -487.4         0.0         0.0     7725.0         0.0     2887.4         0.0
0.0         0.0
 1980 AUG      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
388.3         0.0     1600.0      -388.4         0.0         0.0     7600.0         0.0     2788.3         0.0
0.0         0.0
 1980 SEP      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
322.5         0.0     1600.0      -322.5         0.0         0.0     7600.0         0.0     2722.5         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
 1980 Tot     80000.0    40100.5         0.0         0.0         0.0   120100.5    71000.9         0.0         0.0
2655.9         0.0    25099.5    21344.1         0.0         0.0   120100.5         0.0    30956.4         0.0
0.0         0.0
                               Water Budget  ACFT

               Stream                   From/To      From       From       Total                From River
Well    Reservoir  Reservoir    Stream  Reservoir             To       SoilM
Year   Mo      Inflow      Return     GWStorage     SoilM      Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change       SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
Ave   OCT      4000.0     1306.7         0.0         0.0         0.0     5306.7     4666.7         0.0         0.0
0.0         0.0      640.0         0.0         0.0         0.0     Ave   OCT      4000.0     1306.7         0.0
0.0         0.0     5306.7     4666.7         0.0         0.0         0.0         0.0      640.0         0.0
0.0         0.0     5306.7         0.0      1733.3         0.0         0.0         0.0
Ave   NOV      4000.0     2675.6         0.0         0.0         0.0     6675.6     5555.6         0.0         0.0
0.0         0.0     1120.0         0.0         0.0         0.0     6675.6         0.0     2177.8         0.0
0.0         0.0
Ave   DEC      4000.0     3291.9         0.0         0.0         0.0     7291.9     5851.9         0.0         0.0
0.0         0.0     1440.0         0.0         0.0         0.0     7291.9         0.0     2325.9         0.0
0.0         0.0
Ave   JAN      4000.0     3550.6         0.0         0.0         0.0     7550.6     5950.6         0.0         0.0
0.0         0.0     1600.0         0.0         0.0         0.0     7550.6         0.0     2375.3         0.0
0.0         0.0
Ave   FEB      4000.0     3583.5         0.0         0.0         0.0     7583.5     5983.5         0.0         0.0
0.0         0.0     1600.0         0.0         0.0         0.0     7583.5         0.0     2391.8         0.0
0.0         0.0
Ave   MAR      4000.0     3594.5         0.0         0.0         0.0     7594.5     5994.5         0.0         0.0
25.3         0.0     1600.0       -25.3         0.0         0.0     7594.5         0.0     2422.5         0.0
0.0         0.0
Ave   APR      4000.0     3598.2         0.0         0.0         0.0     7598.2     5998.2         0.0         0.0
328.4         0.0     1600.0      -328.4         0.0         0.0     7598.2         0.0     2727.5         0.0
0.0         0.0
Ave   MAY     20000.0     3724.5         0.0         0.0         0.0    23724.5     6500.0         0.0         0.0
299.2         0.0     5224.5     11700.8         0.0         0.0    23724.5         0.0     2949.2         0.0
0.0         0.0
Ave   JUN     20000.0     3850.0         0.0         0.0         0.0    23850.0     6500.0         0.0         0.0
804.8         0.0     5350.0     11195.2         0.0         0.0    23850.0         0.0     3454.8         0.0
0.0         0.0
Ave   JUL      4000.0     3725.0         0.0         0.0         0.0     7725.0     6000.0         0.0         0.0
487.4         0.0     1725.0      -487.4         0.0         0.0     7725.0         0.0     2887.4         0.0
0.0         0.0
Ave   AUG      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
388.3         0.0     1600.0      -388.4         0.0         0.0     7600.0         0.0     2788.3         0.0
0.0         0.0
Ave   SEP      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
322.5         0.0     1600.0      -322.5         0.0         0.0     7600.0         0.0     2722.5         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
Ave   Tot     80000.0    40100.5         0.0         0.0         0.0   120100.5    71000.9         0.0         0.0
2655.9         0.0    25099.5    21344.1         0.0         0.0   120100.5         0.0    30956.4         0.0
0.0         0.0
                                                                                            0.0 (6)
                                                                                     ___________
                                                                                         71000.9
```

```
  Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency
            + max (Resevoir Evaporation (Evap), 0.0).
        (2) Loss is not part of the Stream Water Balance.
            It is the portion of a diversion, well pumping
            and reservoir seepage that does not return to
            the stream
        (3) Pumping is not part of the Stream Balance.
            Its impact on the stream is included in the From River by Well and Well Depletion columns
        (4) Salvage is not part of the Stream Water Balance.
            It is the portion of well pumping that does not impact the stream
        (5) From Plan is water from a reuse plan.
        (6) Divert does not include diversions by an
            instream flow or a T&C plan. Also to avoid
            double accounting with reservoir storage it has
            reduced by:
              1        0. af/yr for Diverted to Storage.
              2        0. af/yr for a Diversion Carrier.
              3        0. af/yr for a Reservior Carrier.
              4        0. af/yr for a Plan Carrier.
                       0. af/yr Total
                       0. af/yr Total

#
# ________________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex2.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  9:17: 4
# Time Step:         Monthly
#
# ________________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =         8
#
#
__________________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
            operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID               Type         Admin #  On/Off  Str ID #1    Str ID #2           Amount Right Name
Str Name #1               Str Name #2
#    (1) (2)               (3)            (4)     (5)  (6)          (7)                    (8) (9)
(10)                       (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________   ________________________   ________________________

       1 Dem_1_WR_1          3         2.00000       1  Dem_1        -1                100.000 c M&I Demand _1
Municipal Demand _1
       2 Dem_2_WR_1          3         6.00000       1  Dem_2        -1                 60.000 c Irrigation Demand _2
Irrigation Demand _2
       3 Dem_3_WR_1          3         7.00000       1  Dem_3        -1                100.000 c Irrigation Demand _3
Irrigation Demand _3
       4 ISF_WR_1            1         9.00000       1  ISF          -1                 65.500 c Instream Flow 1
Instream Demand
       5 Dem_4_WR_1          3        10.00000       0  Dem_4        -1                100.000 c Irrigation Demand _4
Irrigation Demand _4

       6 Opr_1             109        10.00000       1  -1           -1                 -1.000 x Opr_Res_1_to_Target
```

```
       7 Res_1_WR_1          2        15.00000       1  Res_1        -1           100000.000 a Reservoir_1
Reservoir_1
       8 Dem_5_WR_1          3        15.00000       1  Dem_5        -1              100.000 c Irrigation Demand _5
Irrigation Demand _5

#
# ________________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex2.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  9:17: 1
# Time Step:         Monthly
#
# ________________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex2.* data set
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand              From River By                  From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3        1979  OCT  1000.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  1000.0   500.0     0.0     0.0     0.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
0.0     0.0  1000.0     0.0 Dem_1           100.000
Dem_3       Dem_3        1979  NOV  1000.0   500.0   555.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   555.6   444.4   222.2   277.8     0.0   277.8     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
555.6     0.0   444.4     0.0 Dem_1             100.000
Dem_3       Dem_3        1979  DEC  1000.0   500.0   851.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   851.9   148.1    74.1   425.9     0.0   425.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
851.9     0.0   148.1     0.0 Dem_1             100.000
Dem_3       Dem_3        1980  JAN  1000.0   500.0   950.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   950.6    49.4    24.7   475.3     0.0   475.3     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
950.6     0.0    49.4     0.0 Dem_1             100.000
Dem_3       Dem_3        1980  FEB  1000.0   500.0   983.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   983.5    16.5     8.2   491.8     0.0   491.8     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
983.5     0.0    16.5     0.0 Dem_1             100.000
Dem_3       Dem_3        1980  MAR  1000.0   500.0   994.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   994.5     5.5     2.7   497.3     0.0   497.3     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
994.5     0.0     5.5     0.0 Dem_1             100.000
Dem_3       Dem_3        1980  APR  1000.0   500.0   998.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   998.2     1.8     0.9   499.1     0.0   499.1     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
998.2     0.0     1.8     0.0 Dem_1             100.000
Dem_3       Dem_3        1980  MAY  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1197.0 NA                  -1.000
Dem_3       Dem_3        1980  JUN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1452.4 NA                  -1.000
Dem_3       Dem_3        1980  JUL  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit         -1.000
Dem_3       Dem_3        1980  AUG  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit         -1.000
Dem_3       Dem_3        1980  SEP  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1             100.000
```

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___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_3       Dem_3       1980  TOT 12000.0  6000.0 10334.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 10334.2  1665.8   832.9  5167.1     0.0  5167.1     0.0     0.0 20000.0     0.0     0.0     0.0 20000.0
10334.2     0.0  9665.8  2649.5 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex2.* data set
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    STRUCTURE ID (0 = total)  : Dem_4              2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4       Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4       Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1      5000.   297525.   307442.
      Diversion Rights        :     1       100.     5950.     6149.
      Well Capacity           :     1         0.        0.        0.
      Well Rights             :     0         0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_4       Dem_4       1979  OCT   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0  1000.0     0.0     0.0     0.0     0.0  1000.0
0.0     0.0  1000.0     0.0 Dem_1            100.000
Dem_4       Dem_4       1979  NOV   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   444.4     0.0   138.9     0.0     0.0   583.3
0.0     0.0   583.3     0.0 Dem_1            100.000
Dem_4       Dem_4       1979  DEC   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   148.1     0.0   351.9     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1            100.000
Dem_4       Dem_4       1980  JAN   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    49.4     0.0   450.6     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF              100.000
Dem_4       Dem_4       1980  FEB   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    16.5     0.0   483.5     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1            100.000
Dem_4       Dem_4       1980  MAR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     5.5     0.0   494.5     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1            100.000
Dem_4       Dem_4       1980  APR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     1.8     0.0   498.2     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1            100.000
Dem_4       Dem_4       1980  MAY   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   499.5     0.0     0.0  4499.5
500.0     0.0  3999.5  1197.0 NA               -1.000
Dem_4       Dem_4       1980  JUN   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  1452.4 NA               -1.000
Dem_4       Dem_4       1980  JUL   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF              100.000
Dem_4       Dem_4       1980  AUG   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF              100.000
Dem_4       Dem_4       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1            100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_4       Dem_4       1980  TOT  5500.0  2750.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0  4500.0  2250.0   500.0     0.0   500.0     0.0  9665.8     0.0  4917.1     0.0     0.0 14582.9
1000.0     0.0 13582.9  2649.5 NA               -1.0000     0.0     0.0     0.0     0.0  1000.0  4500.0  2250.0
500.0     0.0   500.0     0.0  9665.8     0.0  4917.1     0.0     0.0 14582.9  1000.0     0.0 13582.9  2649.5 NA
-1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex2.* data set
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    STRUCTURE ID (0 = total)  : Dem_5              -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                          Demand              From River By                  From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To     Total           Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
==================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5        1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1          100.000
Dem_5       Dem_5        1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Dem_5       Dem_5        1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Dem_5       Dem_5        1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Dem_5       Dem_5        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Dem_5       Dem_5        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Dem_5       Dem_5        1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Dem_5       Dem_5        1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Dem_2           60.000
Dem_5       Dem_5        1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Dem_2           60.000
Dem_5       Dem_5        1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Dem_5       Dem_5        1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Dem_5       Dem_5        1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_5       Dem_5        1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0     0.0 NA              -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex2.* data set
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    STRUCTURE ID (0 = total)  : Res_1            7501
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Reservoir_1
    RIVER LOCATION - FROM     : Res_1        Exist. Reservoir
    RIVER LOCATION - TO       : Res_1        Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.
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Shortage                 Water Use
                                        Demand              From River By                   From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Res_1       Res_1       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1          100.000
Res_1       Res_1       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Res_1       Res_1       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
24000.0     0.0 36000.0     0.0 NA              -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex2.* data set
PAGE NO.   5

    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2        Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2        Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                   From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
```

```
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2       1979  OCT  3000.0  1500.0  2666.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2666.7   333.3   166.7  1333.3     0.0  1333.3     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2666.7     0.0   333.3     0.0 Dem_1          100.000
Dem_2       Dem_2       1979  NOV  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1979  DEC  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  JAN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  FEB  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  MAR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  APR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  MAY  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA               -1.000
Dem_2       Dem_2       1980  JUN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA               -1.000
Dem_2       Dem_2       1980  JUL  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  AUG  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  SEP  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
___________ ____________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_2       Dem_2       1980  TOT 36000.0 18000.0 35666.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 35666.7   333.3   166.7 17833.3     0.0 17833.3     0.0 36000.0     0.0     0.0     0.0     0.0 36000.0
35666.7     0.0   333.3     0.0 NA               -1.000

    Gage  Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex2.* data set
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    RIVER LOCATION - FROM     : Riv_50       Confluence
    RIVER LOCATION - TO       : Riv_50       Confluence


Shortage                Water Use
                                        Demand              From River By                       From Carrier By
Carried                ============== ===============================
Structure   River                    ============= ==============================    From    ====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
===================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
NA          Riv_50      1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1333.3     0.0     0.0     0.0     0.0  1333.3
0.0     0.0  1333.3     0.0 NA              -1.000
NA          Riv_50      1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   583.3     0.0     0.0     0.0     0.0   583.3
0.0     0.0   583.3     0.0 NA              -1.000
NA          Riv_50      1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
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NA          Riv_50       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3999.5     0.0   125.0     0.0     0.0  4124.5
0.0     0.0  4124.5  1197.0 NA              -1.000
NA          Riv_50       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4000.0     0.0   250.0     0.0     0.0  4250.0
0.0     0.0  4250.0  1452.4 NA              -1.000
NA          Riv_50       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0   125.0     0.0     0.0   625.0
0.0     0.0   625.0     0.0 NA              -1.000
NA          Riv_50       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
NA          Riv_50       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 13916.2     0.0   500.0     0.0     0.0 14416.2
0.0     0.0 14416.2  2649.5 NA              -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex2.* data set
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    STRUCTURE ID (0 = total)  : Dem_1              5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1       Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1       Exist. Diver. 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand               From River By                  From Carrier By
Carried                ============== ==============================
Structure   River                    ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1333.3     0.0   666.7     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1979  NOV  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   583.3     0.0  1416.7     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1979  DEC  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  JAN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  FEB  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  MAR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  APR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  MAY  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4124.5     0.0  1500.0     0.0     0.0  5624.5
2000.0     0.0  3624.5  1197.0 NA              -1.000
Dem_1       Dem_1        1980  JUN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4250.0     0.0  1500.0     0.0     0.0  5750.0
2000.0     0.0  3750.0  1452.4 NA              -1.000
Dem_1       Dem_1        1980  JUL  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   625.0     0.0  1500.0     0.0     0.0  2125.0
2000.0     0.0   125.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  AUG  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
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Dem_1       Dem_1        1980  SEP  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_1       Dem_1        1980  TOT 24000.0  4800.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 24000.0     0.0     0.0  4800.0     0.0 19200.0     0.0 14416.2     0.0 17083.3     0.0     0.0 31499.5
24000.0     0.0  7499.5  2649.5 NA              -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex2.* data set
PAGE NO.   8

    STRUCTURE ID (0 = total)  : ISF             5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF         Top Instream Flow
    RIVER LOCATION - TO       : ISF.01      Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand             From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total    Total    CU              To    Total           Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln  Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF          1979  OCT  4027.5     0.0   640.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   640.0  3387.5     0.0     0.0     0.0   640.0     0.0     0.0     0.0   640.0     0.0     0.0   640.0
640.0     0.0   640.0     0.0 Hgate_Limit      -1.000
ISF         ISF          1979  NOV  3897.6     0.0  1120.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1120.0  2777.6     0.0     0.0     0.0  1120.0     0.0     0.0     0.0  1120.0     0.0     0.0  1120.0
1120.0     0.0  1120.0     0.0 Hgate_Limit      -1.000
ISF         ISF          1979  DEC  4027.5     0.0  1440.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1440.0  2587.5     0.0     0.0     0.0  1440.0     0.0     0.0     0.0  1440.0     0.0     0.0  1440.0
1440.0     0.0  1440.0     0.0 Hgate_Limit      -1.000
ISF         ISF          1980  JAN  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit      -1.000
ISF         ISF          1980  FEB  3637.7     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2037.7     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit      -1.000
ISF         ISF          1980  MAR  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit      -1.000
ISF         ISF          1980  APR  3897.6     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2297.6     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit      -1.000
ISF         ISF          1980  MAY  4027.5     0.0  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  3624.5     0.0  1600.0     0.0     0.0  5224.5
4027.5     0.0  5224.5  1197.0 NA              -1.000
ISF         ISF          1980  JUN  3897.6     0.0  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0  3750.0     0.0  1600.0     0.0     0.0  5350.0
3897.6     0.0  5350.0  1452.4 NA              -1.000
ISF         ISF          1980  JUL  4027.5     0.0  1725.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1725.0  2302.5     0.0     0.0     0.0  1725.0     0.0   125.0     0.0  1600.0     0.0     0.0  1725.0
1725.0     0.0  1725.0     0.0 Hgate_Limit      -1.000
ISF         ISF          1980  AUG  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit      -1.000
ISF         ISF          1980  SEP  3897.6     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2297.6     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit      -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
ISF         ISF          1980  TOT 47420.5     0.0 22450.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 22450.1 24970.5     0.0     0.0     0.0 22450.1     0.0  7499.5     0.0 17600.0     0.0     0.0 25099.5
22450.1     0.0 25099.5  2649.5 NA              -1.000

   Diversion Summary  ACFT
     STATEMOD
```

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     StateMod Operating Rule Example - ex2.* data set
PAGE NO.   9

    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Bottom Instream Flow
    RIVER LOCATION - FROM     : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow



Shortage                 Water Use
                                        Demand               From River By                  From Carrier By
Carried                 ============== ==============================
Structure   River                    ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
==================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   640.0     0.0     0.0     0.0     0.0   640.0
0.0     0.0   640.0     0.0 NA                -1.000
Baseflow    ISF.01       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1120.0     0.0     0.0     0.0     0.0  1120.0
0.0     0.0  1120.0     0.0 NA                -1.000
Baseflow    ISF.01       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1440.0     0.0     0.0     0.0     0.0  1440.0
0.0     0.0  1440.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5224.5     0.0     0.0     0.0     0.0  5224.5
0.0     0.0  5224.5  1197.0 NA                -1.000
Baseflow    ISF.01       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5350.0     0.0     0.0     0.0     0.0  5350.0
0.0     0.0  5350.0  1452.4 NA                -1.000
Baseflow    ISF.01       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1725.0     0.0     0.0     0.0     0.0  1725.0
0.0     0.0  1725.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Baseflow    ISF.01       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 25099.5     0.0     0.0     0.0     0.0 25099.5
0.0     0.0 25099.5  2649.5 NA                -1.000

#
# _________________________________________________________________________________
# *.xre       Reservoir Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex2.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  9:17: 1
# Time Step:         Monthly
#
# _________________________________________________________________________________

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex2.* data set
PAGE NO.   1

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  0  100000.; where account 0 is the total
    RESERVOIR OWNER           : Total
    RIVER LOCATION            : Exist. Reservoir
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    STRUCTURE DATA          :     #        af
                                _____ _________
      Capacity              :     1   100000.
      Reservoir Rights      :     1   100000.

                                                                                                                     From
Storage to                                                    Station Balance
                                              From River By             From Carrier By
========================                             Targt_0    BOM  =======================
                             Initial ================================= ======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1           0 1979  OCT 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 50000.0100000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1979  NOV 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 50000.0100000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1979  DEC 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 50000.0100000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  JAN 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 50000.0100000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  FEB 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 50000.0100000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  MAR 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    25.3     0.0 49974.7100000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  APR 49974.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   328.4     0.0 49646.4100000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  MAY 49646.4 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0
0.0     0.0   299.2     0.0 61347.2100000.0 50000.0 15000.0     0.0 12000.0     0.0  3000.0
Res_1           0 1980  JUN 61347.2 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0
0.0     0.0   804.8     0.0 72542.4100000.0 38000.0 15000.0     0.0 12000.0     0.0  3000.0
Res_1           0 1980  JUL 72542.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   487.4     0.0 72055.0100000.0 26000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  AUG 72055.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   388.3     0.0 71666.6100000.0 26000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  SEP 71666.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   322.5     0.0 71344.1100000.0 26000.0  3000.0     0.0     0.0     0.0  3000.0
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           0 1980  TOT 50000.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0 24000.0     0.0     0.0
0.0     0.0  2655.9     0.0 71344.1    -1.0    -1.0 60000.0     0.0 24000.0     0.0 36000.0

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex2.* data set
PAGE NO.   2

    RESERVOIR ID            : Res_1
    RESERVOIR NAME          : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  1   50000.; where account 0 is the total
    RESERVOIR OWNER         : Res_1 Own_1
    RIVER LOCATION          : Exist. Reservoir

                                                                                                                     From
Storage to                                                    Station Balance
                                              From River By             From Carrier By
========================                             Targt_0    BOM  =======================
                             Initial ================================= ======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1           1 1979  OCT 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49975.0 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1979  NOV 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49975.0 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1979  DEC 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49975.0 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  JAN 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49975.0 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  FEB 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49975.0 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  MAR 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    25.3     0.0 49949.7 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  APR 49949.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   328.2     0.0 49621.5 50025.3 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  MAY 49621.5    90.2     0.0     0.0     0.0     0.0     0.0     0.0    90.2     0.0     0.0
0.0     0.0   241.3     0.0 49470.5 50353.6 50000.0 15000.0     0.0 12000.0     0.0  3000.0
Res_1           1 1980  JUN 49470.5   164.4     0.0     0.0     0.0     0.0     0.0     0.0   164.4     0.0     0.0
0.0     0.0   544.6     0.0 49090.3 38652.8 38000.0 15000.0     0.0 12000.0     0.0  3000.0
Res_1           1 1980  JUL 49090.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   329.9     0.0 48760.4 27457.6 26000.0  3000.0     0.0     0.0     0.0  3000.0
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Res_1           1 1980  AUG 48760.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   262.8     0.0 48497.6 27945.0 26000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  SEP 48497.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   218.3     0.0 48279.3 28333.4 26000.0  3000.0     0.0     0.0     0.0  3000.0
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  TOT 49975.0   254.6     0.0     0.0     0.0     0.0     0.0     0.0   254.6     0.0     0.0
0.0     0.0  1950.3     0.0 48279.3    -1.0    -1.0 60000.0     0.0 24000.0     0.0 36000.0
   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex2.* data set
PAGE NO.   3

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  2   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_2
    RIVER LOCATION            : Exist. Reservoir

                                                                                                            From
Storage to                                                    Station Balance
                                             From River By                 From Carrier By
========================                            Targt_0    BOM  =======================
                             Initial ================================= ======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree    River  River    River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln    Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit    Limit    Inflow Release Dvert

  River River
by Well Outflow
Res_1           2 1979  OCT    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1979  NOV    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1979  DEC    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  JAN    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  FEB    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  MAR    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50000.0 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  APR    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.2     0.0    24.8 50025.3 50000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  MAY    24.8 11909.8     0.0     0.0     0.0     0.0     0.0     0.0 11909.8     0.0     0.0
0.0     0.0    57.9     0.0 11876.7 50353.6 50000.0 15000.0     0.0 12000.0     0.0  3000.0
Res_1           2 1980  JUN 11876.7 11835.6     0.0     0.0     0.0     0.0     0.0     0.0 11835.6     0.0     0.0
0.0     0.0   260.2     0.0 23452.2 38652.8 38000.0 15000.0     0.0 12000.0     0.0  3000.0
Res_1           2 1980  JUL 23452.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   157.6     0.0 23294.6 27457.6 26000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  AUG 23294.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   125.5     0.0 23169.0 27945.0 26000.0  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  SEP 23169.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   104.3     0.0 23064.7 28333.4 26000.0  3000.0     0.0     0.0     0.0  3000.0
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  TOT    25.0 23745.4     0.0     0.0     0.0     0.0     0.0     0.0 23745.4     0.0     0.0
0.0     0.0   705.7     0.0 23064.7    -1.0    -1.0 60000.0     0.0 24000.0     0.0 36000.0#
# ________________________________________________________________________________
# *.xop       Operational Right Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex2.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  9:17: 1
# Time Step:         Monthly
#
# ________________________________________________________________________________

 Operational Right Summary  ACFT

 ID = Opr_1             Name = Opr_Res_1_to_Target      Opr Type =    9   Admin # =        10.00000
 Source 1 = Res_1       Destination = 0                 Year On =     0   Year Off =    999
YEAR     OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
AVG      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
```

Example 3

```
# Exhibit 3.1
# *.rsp; response file for Statemod Example 3
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                      Name
# ______________________________________  _____________________________
Control                                   = ex3.ctl
River_Network                             = ..\ex2\ex2.rin
StreamGage_Station                        = ..\ex1\ex1.ris
Stream_Base_Monthly                       = ..\ex1\ex1.rim
Diversion_Station                         = ..\ex1\ex1.dds
Diversion_Right                           = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                  = ..\ex1\ex1.ddm
Reservoir_Station                         = ..\ex2\ex2.res
Reservoir_Right                           = ..\ex2\ex2.rer
Reservoir_Target_Monthly                  = ..\ex2\ex2.tam
Evaporation_Monthly                       = ..\ex2\ex2.eva
Instreamflow_Station                      = ..\ex1\ex1.ifs
Instreamflow_Right                        = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly        = ..\ex1\ex1.ifa
Operational_Right                         = ex3.opr
DelayTable_Monthly                        = ..\ex1\ex1.urm
OutputRequest                             = ..\ex2\ex2.out

# Exhibit 3.2
# ex*.ctl;  Control file for StateMod Example 3
#
#
  STATEMOD
  StateMod Operating Rule Example - ex3.* data set
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;    ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;      ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       1     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       6     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       1     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       0     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       0     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       1     : isig    Number of significant digits behind decimal point in output files

# Exhibit 3.3
# *.opr; operating rules file for Statemod Example 3
#      This file lists the operating rules used in model simulation
#
#
#                     GUIDE TO COLUMN ENTRIES
#     ========================================
```

```
#          ID           ID number of operating rule that is used to separate operating rule output in *.xop file
#          Name       Name of operating rule - used for descriptive purposes only
#          Admin#     Administration number used to determine priority of operational water rights relative to other
operations and direct diversion, reservoir, instream flow, and well rights (see tabulation in *.xwr file)
#          # Str      Number of carrier structures, monthly on/off switches, or monthly volumetrics (flag telling
StateMod program the number of entries on next line)
#          On/Off     1 for ON and 0 for OFF
#          Dest ID    Destination of operating rule whose demand is to be met by simulating the operating rule
#          Dest Ac    Account at destination to be met by operating rule - typically 1 for a diversion structure and
account number for reservoir destination
#          Sou1 ID    ID number of primary source of water under which water right is being diverted in operating rule
- typically a water right, reservoir, or Plan structure
#          Sou1 Ac    Account of Sou1 - typically 1 for a diversion structure and account number for reservoir source
#          Sou2 ID    ID of Plan where reusable storage water or reusable ditch credits is accounted
#          Sou2 Ac    Percentage of Plan supplies available for operation
#          Type       Rule type corresponding with definitions in Chapter 4 of StateMod documentation
#          ReusePlan  ID of Plan where reusable return flows or diversions to storage are accounted
#          Div Type   'Diversion' indicates pro-rata diversion of source water right priority or exchange of reusable
credits to Dest1
#                        'Depletion' indicates pro-rata diversion of source water right priority consumptive use or
augmentation of upstream diversions at Dest1
#          OprLoss    Percentage of simulated diversion lost in carrier ditch (only applies to certain rules - see
StateMod documentation, Section 4.13)
#          Limit      Capacity limit for carrier structures different from capacity in .dds file (used to represent
constricted conveyance capacity for winter deliveries to reservoirs)
#          Comments   Description of rule type
#
# ID        Name                    NA                    Admin#   # Str  On/Off Dest Id     Dest Ac  Sou1 Id     Sou1
Ac  Sou2 Id     Sou2 Ac     Type ReusePlan    Div Type      OprLoss   Limit Comments
# ---------eb----------------------eb----------exxxxb----------eb------eb------e-b----------eb------e-b----------eb---
---e-b----------eb------eb------exb----------exb----------exb------eb------exb----------
Opr_1       Opr_Res_1_to_Target                        10.00000     0.      1 0                   0 Res_1
0 0              0      9  NA           Diversion          0       0       0   9999 Reservoir Release to Target
Opr_2       Opr_Res_1_to_Dem_2                          9.00000     0.      1 Dem_2               1 Res_1
1 0              0      2  NA           NA                 0       0       0   9999 Reservoir Release to
Diversion
Opr_3       Opr_Res_1_to_ISF                            9.00000     0.      1 ISF                 1 Res_1
2 0              0      1  NA           NA                 0       0       0   9999 Reservoir Release to
Instream Flow

#
# ___________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  9:37: 8
# Time Step:         Monthly
#
# ___________________________________________________________________________________

                               Water Budget  ACFT

               Stream                    From/To      From       From       Total                From River
Well    Reservoir  Reservoir    Stream   Reservoir           To        SoilM
Year   Mo      Inflow      Return      GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change        SoilM       Change

 Total
Outflow         Delta        CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
1979 OCT      4000.0     1417.8         0.0         0.0         0.0      5417.8      5111.1         0.0         0.0
0.0          0.0      665.0      -358.3         0.0         0.0      5417.8         0.0      1955.6         0.0
0.0          0.0
 1979 NOV      4000.0     2823.7         0.0         0.0         0.0      6823.7      5703.7         0.0         0.0
0.0          0.0     1120.0         0.0         0.0         0.0      6823.7         0.0      2251.9         0.0
0.0          0.0
 1979 DEC      4000.0     3341.2         0.0         0.0         0.0      7341.2      5901.2         0.0         0.0
0.0          0.0     1440.0         0.0         0.0         0.0      7341.2         0.0      2350.6         0.0
0.0          0.0
 1980 JAN      4000.0     3567.1         0.0         0.0         0.0      7567.1      5967.1         0.0         0.0
0.0          0.0     1600.0         0.0         0.0         0.0      7567.1         0.0      2383.5         0.0
0.0          0.0
 1980 FEB      4000.0     3589.0         0.0         0.0         0.0      7589.0      5989.0         0.0         0.0
0.0          0.0     1600.0         0.0         0.0         0.0      7589.0         0.0      2394.5         0.0
0.0          0.0
 1980 MAR      4000.0     3596.3         0.0         0.0         0.0      7596.3      5996.3         0.0         0.0
25.1          0.0      1600.0       -25.1         0.0         0.0      7596.3         0.0      2423.3         0.0
0.0          0.0
 1980 APR      4000.0     3598.8         0.0         0.0         0.0      7598.8      5998.8         0.0         0.0
326.4          0.0      1600.0      -326.4         0.0         0.0      7598.8         0.0      2725.8         0.0
0.0          0.0
 1980 MAY     20000.0     3724.7         0.0         0.0         0.0     23724.7      6500.0         0.0         0.0
297.8          0.0      5224.7     11702.2         0.0         0.0     23724.7         0.0      2947.8         0.0
0.0          0.0
```

```
 1980 JUN     20000.0     3850.0         0.0         0.0         0.0    23850.0     6500.0         0.0         0.0
802.1        0.0     5350.0    11197.9         0.0         0.0    23850.0         0.0     3452.1         0.0
0.0         0.0
 1980 JUL      4000.0     3725.0         0.0         0.0         0.0     7725.0     6000.0         0.0         0.0
481.2        0.0     4027.5    -2783.7         0.0         0.0     7725.0         0.0     2881.2         0.0
0.0         0.0
 1980 AUG      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
375.0        0.0     4027.5    -2802.5         0.0         0.0     7600.0         0.0     2775.0         0.0
0.0         0.0
 1980 SEP      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
304.3        0.0     3897.6    -2601.8         0.0         0.0     7600.0         0.0     2704.3         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
 1980 Tot     80000.0    40433.6         0.0         0.0         0.0   120433.6    71667.3         0.0         0.0
2611.9         0.0    32152.3    14002.2         0.0         0.0   120433.7         0.0    31245.5         0.0
0.0         0.0
                               Water Budget  ACFT

              Stream                     From/To      From       From       Total                From River
Well    Reservoir  Reservoir    Stream   Reservoir            To       SoilM
Year   Mo      Inflow      Return      GWStorage      SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change        SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
Ave   OCT      4000.0     1390.0         0.0         0.0         0.0     5390.0     5000.0         0.0         0.0
0.0         0.0       665.0      -275.0         0.0         0.0     Ave   OCT      4000.0     1417.8         0.0
0.0         0.0      5417.8      5111.1         0.0         0.0         0.0         0.0      665.0      -358.3
0.0         0.0      5417.8         0.0      1955.6         0.0         0.0         0.0
Ave   NOV      4000.0     2823.7         0.0         0.0         0.0     6823.7     5703.7         0.0         0.0
0.0         0.0      1120.0         0.0         0.0         0.0     6823.7         0.0     2251.9         0.0
0.0         0.0
Ave   DEC      4000.0     3341.2         0.0         0.0         0.0     7341.2     5901.2         0.0         0.0
0.0         0.0      1440.0         0.0         0.0         0.0     7341.2         0.0     2350.6         0.0
0.0         0.0
Ave   JAN      4000.0     3567.1         0.0         0.0         0.0     7567.1     5967.1         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0     7567.1         0.0     2383.5         0.0
0.0         0.0
Ave   FEB      4000.0     3589.0         0.0         0.0         0.0     7589.0     5989.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0     7589.0         0.0     2394.5         0.0
0.0         0.0
Ave   MAR      4000.0     3596.3         0.0         0.0         0.0     7596.3     5996.3         0.0         0.0
25.1         0.0      1600.0       -25.1         0.0         0.0     7596.3         0.0     2423.3         0.0
0.0         0.0
Ave   APR      4000.0     3598.8         0.0         0.0         0.0     7598.8     5998.8         0.0         0.0
326.4        0.0      1600.0      -326.4         0.0         0.0     7598.8         0.0     2725.8         0.0
0.0         0.0
Ave   MAY     20000.0     3724.7         0.0         0.0         0.0    23724.7     6500.0         0.0         0.0
297.8        0.0     5224.7    11702.2         0.0         0.0    23724.7         0.0     2947.8         0.0
0.0         0.0
Ave   JUN     20000.0     3850.0         0.0         0.0         0.0    23850.0     6500.0         0.0         0.0
802.1        0.0     5350.0    11197.9         0.0         0.0    23850.0         0.0     3452.1         0.0
0.0         0.0
Ave   JUL      4000.0     3725.0         0.0         0.0         0.0     7725.0     6000.0         0.0         0.0
481.2        0.0     4027.5    -2783.7         0.0         0.0     7725.0         0.0     2881.2         0.0
0.0         0.0
Ave   AUG      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
375.0        0.0     4027.5    -2802.5         0.0         0.0     7600.0         0.0     2775.0         0.0
0.0         0.0
Ave   SEP      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
304.3        0.0     3897.6    -2601.8         0.0         0.0     7600.0         0.0     2704.3         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
Ave   Tot     80000.0    40433.6         0.0         0.0         0.0   120433.6    71667.3         0.0         0.0
2611.9         0.0    32152.3    14002.2         0.0         0.0   120433.7         0.0    31245.5         0.0
0.0         0.0
                                                                                            0.0 (6)
                                                                                     ___________
                                                                                        71667.3
  Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency
           + max (Resevoir Evaporation (Evap), 0.0).
        (2) Loss is not part of the Stream Water Balance.
            It is the portion of a diversion, well pumping
            and reservoir seepage that does not return to
            the stream
        (3) Pumping is not part of the Stream Balance.
            Its impact on the stream is included in the From River by Well and Well Depletion columns
        (4) Salvage is not part of the Stream Water Balance.
            It is the portion of well pumping that does not impact the stream
        (5) From Plan is water from a reuse plan.
        (6) Divert does not include diversions by an
            instream flow or a T&C plan. Also to avoid
            double accounting with reservoir storage it has
            reduced by:
```

```
              1       0. af/yr for Diverted to Storage.
              2       0. af/yr for a Diversion Carrier.
              3       0. af/yr for a Reservior Carrier.
              4       0. af/yr for a Plan Carrier.
                      0. af/yr Total

#
# ________________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  9:37:12
# Time Step:         Monthly
#
# ________________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =         10
#
#
__________________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
            operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID               Type         Admin #  On/Off  Str ID #1    Str ID #2           Amount Right Name
Str Name #1               Str Name #2
#    (1) (2)               (3)              (4)     (5)  (6)          (7)                    (8) (9)
(10)                       (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

       1 Dem_1_WR_1          3        2.00000       1  Dem_1        -1              100.000 c M&I Demand _1
Municipal Demand _1
       2 Dem_2_WR_1          3        6.00000       1  Dem_2        -1               60.000 c Irrigation Demand _2
Irrigation Demand _2
       3 Dem_3_WR_1          3        7.00000       1  Dem_3        -1              100.000 c Irrigation Demand _3
Irrigation Demand _3
       4 ISF_WR_1            1        9.00000       1  ISF          -1               65.500 c Instream Flow 1
Instream Demand

       5 Opr_2             102        9.00000       1  Dem_2        -1               -1.000 x Opr_Res_1_to_Dem_2
Irrigation Demand _2
       6 Opr_3             101        9.00000       1  ISF          -1               -1.000 x Opr_Res_1_to_ISF
Instream Demand

       7 Dem_4_WR_1          3       10.00000       1  Dem_4        -1              100.000 c Irrigation Demand _4
Irrigation Demand _4

       8 Opr_1             109       10.00000       1  -1           -1               -1.000 x Opr_Res_1_to_Target

       9 Res_1_WR_1          2       15.00000       1  Res_1        -1           100000.000 a Reservoir_1
Reservoir_1
      10 Dem_5_WR_1          3       15.00000       1  Dem_5        -1              100.000 c Irrigation Demand _5
Irrigation Demand _5

#
# ________________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
```

```
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  9:37: 2
# Time Step:         Monthly
#
# ___________________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3        1979  OCT  1000.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  1000.0   500.0     0.0     0.0     0.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
0.0     0.0  1000.0     0.0 Dem_1            100.000
Dem_3       Dem_3        1979  NOV  1000.0   500.0   703.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   703.7   296.3   148.1   351.9     0.0   351.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
703.7     0.0   296.3     0.0 Dem_1            100.000
Dem_3       Dem_3        1979  DEC  1000.0   500.0   901.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   901.2    98.8    49.4   450.6     0.0   450.6     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
901.2     0.0    98.8     0.0 Dem_1            100.000
Dem_3       Dem_3        1980  JAN  1000.0   500.0   967.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   967.1    32.9    16.5   483.5     0.0   483.5     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
967.1     0.0    32.9     0.0 Dem_1            100.000
Dem_3       Dem_3        1980  FEB  1000.0   500.0   989.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   989.0    11.0     5.5   494.5     0.0   494.5     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
989.0     0.0    11.0     0.0 Dem_1            100.000
Dem_3       Dem_3        1980  MAR  1000.0   500.0   996.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   996.3     3.7     1.8   498.2     0.0   498.2     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
996.3     0.0     3.7     0.0 Dem_1            100.000
Dem_3       Dem_3        1980  APR  1000.0   500.0   998.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   998.8     1.2     0.6   499.4     0.0   499.4     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
998.8     0.0     1.2     0.0 Dem_1            100.000
Dem_3       Dem_3        1980  MAY  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1197.2 NA              -1.000
Dem_3       Dem_3        1980  JUN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1452.4 NA              -1.000
Dem_3       Dem_3        1980  JUL  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_3       Dem_3        1980  AUG  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_3       Dem_3        1980  SEP  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1            100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________

Dem_3       Dem_3        1980  TOT 12000.0  6000.0 10556.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 10556.2  1443.8   721.9  5278.1     0.0  5278.1     0.0     0.0 20000.0     0.0     0.0     0.0 20000.0
10556.2     0.0  9443.8  2649.6 NA              -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    STRUCTURE ID (0 = total)  : Dem_4              2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4        Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4        Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand               From River By                  From Carrier By
Carried                 ============== ===============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_4       Dem_4        1979  OCT   500.0   250.0   111.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   111.1   388.9   194.4    55.6     0.0    55.6     0.0  1000.0     0.0     0.0     0.0     0.0  1000.0
111.1     0.0   888.9     0.0 ISF             100.000
Dem_4       Dem_4        1979  NOV   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   296.3     0.0   175.9     0.0     0.0   472.2
0.0     0.0   472.2     0.0 ISF             100.000
Dem_4       Dem_4        1979  DEC   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    98.8     0.0   401.2     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4        1980  JAN   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    32.9     0.0   467.1     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4        1980  FEB   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    11.0     0.0   489.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4        1980  MAR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     3.7     0.0   496.3     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4        1980  APR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     1.2     0.0   498.8     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4        1980  MAY   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   499.7     0.0     0.0  4499.7
500.0     0.0  3999.7  1197.2 NA              -1.000
Dem_4       Dem_4        1980  JUN   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  1452.4 NA              -1.000
Dem_4       Dem_4        1980  JUL   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4        1980  AUG   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4        1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_4       Dem_4        1980  TOT  5500.0  2750.0  1111.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1111.1  4388.9  2194.4   555.6     0.0   555.6     0.0  9443.8     0.0  5028.1     0.0     0.0 14471.9
1111.1     0.0 13360.8  2649.6 NA              -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    STRUCTURE ID (0 = total)  : Dem_5             -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.
```

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Shortage                 Water Use
                                        Demand               From River By                        From Carrier By
Carried                 ============== ===============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU               To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
====================================== ========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5        1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
Dem_5       Dem_5        1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
Dem_5       Dem_5        1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
Dem_5       Dem_5        1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
___________ ___________  _____ _____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_5       Dem_5        1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0     0.0 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    STRUCTURE ID (0 = total)  : Res_1           7501
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Reservoir_1
    RIVER LOCATION - FROM     : Res_1       Exist. Reservoir
    RIVER LOCATION - TO       : Res_1       Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.



Shortage                 Water Use
                                        Demand               From River By                        From Carrier By
Carried                 ============== ===============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU               To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
====================================== ========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
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Res_1       Res_1        1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0  -
358.3     0.0  3358.3     0.0 ISF             100.000
Res_1       Res_1        1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2302.5     0.0  5302.5     0.0 ISF             100.000
Res_1       Res_1        1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2427.5     0.0  5427.5     0.0 ISF             100.000
Res_1       Res_1        1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2297.6     0.0  5297.6     0.0 ISF             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Res_1       Res_1        1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
16614.1     0.0 43385.9     0.0 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2       Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2       Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                      From Carrier By
Carried                 ============== ===============================
Structure   River                    ============= ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total          Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
===================================== ========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2        1979  OCT  3000.0  1500.0  2666.7   333.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3358.3     0.0     0.0     0.0     0.0  3358.3
3000.0     0.0   358.3     0.0 Dem_1           100.000
Dem_2       Dem_2        1979  NOV  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2        1979  DEC  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2        1980  JAN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
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Dem_2       Dem_2       1980  FEB  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  MAR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  APR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  MAY  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA                -1.000
Dem_2       Dem_2       1980  JUN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA                -1.000
Dem_2       Dem_2       1980  JUL  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5302.5     0.0     0.0     0.0     0.0  5302.5
3000.0     0.0  2302.5     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  AUG  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5427.5     0.0     0.0     0.0     0.0  5427.5
3000.0     0.0  2427.5     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  SEP  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5297.6     0.0     0.0     0.0     0.0  5297.6
3000.0     0.0  2297.6     0.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_2       Dem_2       1980  TOT 36000.0 18000.0 35666.7   333.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 36000.0     0.0     0.0 18000.0     0.0 18000.0     0.0 43385.9     0.0     0.0     0.0     0.0 43385.9
36000.0     0.0  7385.9     0.0 NA                 -1.000

    Gage  Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    RIVER LOCATION - FROM     : Riv_50       Confluence
    RIVER LOCATION - TO       : Riv_50       Confluence



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                    ============== ==============================    From    =====================
Exchange  From  Total   Total    CU            To    Total          Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                         Station Balance
====================================== =======================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
NA          Riv_50      1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1247.2     0.0    27.8     0.0     0.0  1275.0
0.0     0.0  1275.0     0.0 NA              -1.000
NA          Riv_50      1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   472.2     0.0    27.8     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3999.7     0.0   125.0     0.0     0.0  4124.7
0.0     0.0  4124.7  1197.2 NA              -1.000
NA          Riv_50      1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4000.0     0.0   250.0     0.0     0.0  4250.0
0.0     0.0  4250.0  1452.4 NA              -1.000
NA          Riv_50      1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2802.5     0.0   125.0     0.0     0.0  2927.5
0.0     0.0  2927.5     0.0 NA              -1.000
NA          Riv_50      1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2927.5     0.0     0.0     0.0     0.0  2927.5
0.0     0.0  2927.5     0.0 NA              -1.000
NA          Riv_50      1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2797.6     0.0     0.0     0.0     0.0  2797.6
0.0     0.0  2797.6     0.0 NA              -1.000
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___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
NA          Riv_50       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 20746.7     0.0   555.6     0.0     0.0 21302.3
0.0     0.0 21302.3  2649.6 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    STRUCTURE ID (0 = total)  : Dem_1              5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand               From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                    ============== ==============================    From    ====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== ========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1275.0     0.0   750.0     0.0     0.0  2025.0
2000.0     0.0    25.0     0.0 NA               -1.000
Dem_1       Dem_1        1979  NOV  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1979  DEC  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1980  JAN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1980  FEB  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1980  MAR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1980  APR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1980  MAY  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4124.7     0.0  1500.0     0.0     0.0  5624.7
2000.0     0.0  3624.7  1197.2 NA               -1.000
Dem_1       Dem_1        1980  JUN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4250.0     0.0  1500.0     0.0     0.0  5750.0
2000.0     0.0  3750.0  1452.4 NA               -1.000
Dem_1       Dem_1        1980  JUL  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2927.5     0.0  1500.0     0.0     0.0  4427.5
2000.0     0.0  2427.5     0.0 NA               -1.000
Dem_1       Dem_1        1980  AUG  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2927.5     0.0  1500.0     0.0     0.0  4427.5
2000.0     0.0  2427.5     0.0 NA               -1.000
Dem_1       Dem_1        1980  SEP  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2797.6     0.0  1500.0     0.0     0.0  4297.6
2000.0     0.0  2297.6     0.0 NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_1       Dem_1        1980  TOT 24000.0  4800.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 24000.0     0.0     0.0  4800.0     0.0 19200.0     0.0 21302.3     0.0 17250.0     0.0     0.0 38552.3
24000.0     0.0 14552.3  2649.6 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   8

    STRUCTURE ID (0 = total)  : ISF             5001
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    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF          Top Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand               From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID          Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                  Station Balance
==================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF        ISF          1979  OCT  4027.5     0.0  640.0    25.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   665.0  3362.5    0.0     0.0     0.0  665.0     0.0    25.0     0.0   640.0     0.0     0.0   665.0
665.0     0.0   665.0     0.0 Hgate_Limit       -1.000
ISF        ISF          1979  NOV  3897.6     0.0  1120.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1120.0  2777.6    0.0     0.0     0.0  1120.0     0.0     0.0     0.0  1120.0     0.0     0.0  1120.0
1120.0     0.0  1120.0     0.0 Hgate_Limit       -1.000
ISF        ISF          1979  DEC  4027.5     0.0  1440.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1440.0  2587.5    0.0     0.0     0.0  1440.0     0.0     0.0     0.0  1440.0     0.0     0.0  1440.0
1440.0     0.0  1440.0     0.0 Hgate_Limit       -1.000
ISF        ISF          1980  JAN  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5    0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF        ISF          1980  FEB  3637.7     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2037.7    0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF        ISF          1980  MAR  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5    0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF        ISF          1980  APR  3897.6     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2297.6    0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF        ISF          1980  MAY  4027.5     0.0  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0    0.0     0.0     0.0  4027.5     0.0  3624.7     0.0  1600.0     0.0     0.0  5224.7
4027.5     0.0  5224.7  1197.2 NA                -1.000
ISF        ISF          1980  JUN  3897.6     0.0  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0    0.0     0.0     0.0  3897.6     0.0  3750.0     0.0  1600.0     0.0     0.0  5350.0
3897.6     0.0  5350.0  1452.4 NA                -1.000
ISF        ISF          1980  JUL  4027.5     0.0  1725.0  2302.5     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0    0.0     0.0     0.0  4027.5     0.0  2427.5     0.0  1600.0     0.0     0.0  4027.5
4027.5     0.0  4027.5     0.0 Hgate_Limit       -1.000
ISF        ISF          1980  AUG  4027.5     0.0  1600.0  2427.5     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0    0.0     0.0     0.0  4027.5     0.0  2427.5     0.0  1600.0     0.0     0.0  4027.5
4027.5     0.0  4027.5     0.0 Hgate_Limit       -1.000
ISF        ISF          1980  SEP  3897.6     0.0  1600.0  2297.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0    0.0     0.0     0.0  3897.6     0.0  2297.6     0.0  1600.0     0.0     0.0  3897.6
3897.6     0.0  3897.6     0.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
ISF        ISF          1980  TOT 47420.5     0.0 22450.1  7052.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 29502.6 17917.9    0.0     0.0     0.0 29502.6     0.0 14552.3     0.0 17600.0     0.0     0.0 32152.3
29502.6     0.0 32152.3  2649.6 NA                -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   9

    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Bottom Instream Flow
    RIVER LOCATION - FROM     : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


Shortage                 Water Use
                                        Demand               From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
```

```
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   665.0     0.0     0.0     0.0     0.0   665.0
0.0     0.0   665.0     0.0 NA                -1.000
Baseflow    ISF.01       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1120.0     0.0     0.0     0.0     0.0  1120.0
0.0     0.0  1120.0     0.0 NA                -1.000
Baseflow    ISF.01       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1440.0     0.0     0.0     0.0     0.0  1440.0
0.0     0.0  1440.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5224.7     0.0     0.0     0.0     0.0  5224.7
0.0     0.0  5224.7  1197.2 NA                -1.000
Baseflow    ISF.01       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5350.0     0.0     0.0     0.0     0.0  5350.0
0.0     0.0  5350.0  1452.4 NA                -1.000
Baseflow    ISF.01       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5
0.0     0.0  4027.5     0.0 NA                -1.000
Baseflow    ISF.01       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5
0.0     0.0  4027.5     0.0 NA                -1.000
Baseflow    ISF.01       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6
0.0     0.0  3897.6     0.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Baseflow    ISF.01       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 32152.3     0.0     0.0     0.0     0.0 32152.3
0.0     0.0 32152.3  2649.6 NA                -1.000
#
# ________________________________________________________________________________
# *.xre       Reservoir Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8  9:37: 2
# Time Step:         Monthly
#
# ________________________________________________________________________________

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   1

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  0  100000.; where account 0 is the total
    RESERVOIR OWNER           : Total
    RIVER LOCATION            : Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.

                                                                                                                        From
Storage to                                                              Station Balance
                                                      From River By                  From Carrier By
========================                                     Targt_0    BOM  =======================
                             Initial ================================= =======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln    Loss    Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
```

```
by Well Outflow
Res_1           0 1979  OCT 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   358.3     0.0
0.0   358.3     0.0     0.0 49641.7100000.0 50000.0  3000.0   358.3     0.0     0.0  3358.3
Res_1           0 1979  NOV 49641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49641.7100000.0 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1979  DEC 49641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49641.7100000.0 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  JAN 49641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49641.7100000.0 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  FEB 49641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49641.7100000.0 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  MAR 49641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    25.1     0.0 49616.6100000.0 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  APR 49616.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   326.4     0.0 49290.2100000.0 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  MAY 49290.2 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0
0.0     0.0   297.8     0.0 60992.4100000.0 50358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1           0 1980  JUN 60992.4 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0
0.0     0.0   802.1     0.0 72190.3100000.0 38358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1           0 1980  JUL 72190.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5     0.0
0.0  2302.5   481.2     0.0 69406.6100000.0 26358.3  3000.0  2302.5     0.0     0.0  5302.5
Res_1           0 1980  AUG 69406.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2427.5     0.0
0.0  2427.5   375.0     0.0 66604.1100000.0 26358.3  3000.0  2427.5     0.0     0.0  5427.5
Res_1           0 1980  SEP 66604.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2297.6     0.0
0.0  2297.6   304.3     0.0 64002.3100000.0 26358.3  3000.0  2297.6     0.0     0.0  5297.6
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           0 1980  TOT 50000.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0 24000.0  7385.9     0.0
0.0  7385.9  2611.9     0.0 64002.3    -1.0    -1.0 60000.0  7385.9 24000.0     0.0 43385.9

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   2

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  1   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_1
    RIVER LOCATION            : Exist. Reservoir

                                                                                                                        From
Storage to                                                    Station Balance
                                                  From River By                 From Carrier By
========================                                 Targt_0    BOM  =======================
                             Initial ================================ ======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1           1 1979  OCT 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   333.3     0.0
0.0   333.3     0.0     0.0 49641.7 50000.0 50000.0  3000.0   358.3     0.0     0.0  3358.3
Res_1           1 1979  NOV 49641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49641.7 50358.3 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1979  DEC 49641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49641.7 50358.3 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  JAN 49641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49641.7 50358.3 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  FEB 49641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49641.7 50358.3 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  MAR 49641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    25.1     0.0 49616.6 50358.3 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  APR 49616.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   326.4     0.0 49290.1 50383.4 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  MAY 49290.1   168.0     0.0     0.0     0.0     0.0     0.0     0.0   168.0     0.0     0.0
0.0     0.0   240.3     0.0 49217.8 50709.9 50358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1           1 1980  JUN 49217.8   240.6     0.0     0.0     0.0     0.0     0.0     0.0   240.6     0.0     0.0
0.0     0.0   543.5     0.0 48915.0 39007.6 38358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1           1 1980  JUL 48915.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   336.8     0.0 48578.2 27809.7 26358.3  3000.0  2302.5     0.0     0.0  5302.5
Res_1           1 1980  AUG 48578.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   272.0     0.0 48306.2 30593.4 26358.3  3000.0  2427.5     0.0     0.0  5427.5
Res_1           1 1980  SEP 48306.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   228.6     0.0 48077.6 33395.9 26358.3  3000.0  2297.6     0.0     0.0  5297.6
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  TOT 49975.0   408.6     0.0     0.0     0.0     0.0     0.0     0.0   408.6   333.3     0.0
0.0   333.3  1972.6     0.0 48077.6    -1.0    -1.0 60000.0  7385.9 24000.0     0.0 43385.9
   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   3

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  2   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_2
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    RIVER LOCATION           : Exist. Reservoir

                                                                                                                        From
Storage to                                                    Station Balance
                                            From River By                 From Carrier By
========================                           Targt_0    BOM  =======================
                             Initial ================================= =======================  Total  River    River
Carrier  Total          Seep & EOM    Stor_n  Decree   River  River   River
Reservoir      Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1           2 1979  OCT    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    25.0     0.0
0.0    25.0     0.0    0.0     0.0 50000.0 50000.0  3000.0   358.3     0.0     0.0  3358.3
Res_1           2 1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    0.0     0.0 50358.3 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    0.0     0.0 50358.3 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    0.0     0.0 50358.3 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    0.0     0.0 50358.3 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    0.0     0.0 50358.3 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    0.0     0.0 50383.4 50358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  MAY     0.0 11832.0     0.0     0.0     0.0     0.0     0.0     0.0 11832.0     0.0     0.0
0.0     0.0    57.5    0.0 11774.5 50709.9 50358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1           2 1980  JUN 11774.5 11759.4     0.0     0.0     0.0     0.0     0.0     0.0 11759.4     0.0     0.0
0.0     0.0   258.6    0.0 23275.3 39007.6 38358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1           2 1980  JUL 23275.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5     0.0
0.0  2302.5   144.4    0.0 20828.4 27809.7 26358.3  3000.0  2302.5     0.0     0.0  5302.5
Res_1           2 1980  AUG 20828.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2427.5     0.0
0.0  2427.5   103.0    0.0 18297.9 30593.4 26358.3  3000.0  2427.5     0.0     0.0  5427.5
Res_1           2 1980  SEP 18297.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2297.6     0.0
0.0  2297.6    75.7    0.0 15924.6 33395.9 26358.3  3000.0  2297.6     0.0     0.0  5297.6
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  TOT    25.0 23591.4     0.0     0.0     0.0     0.0     0.0     0.0 23591.4  7052.6     0.0
0.0  7052.6   639.2    0.0 15924.6    -1.0    -1.0 60000.0  7385.9 24000.0     0.0 43385.9#
#
# _________________________________________________________________________________
# *.xop       Operational Right Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 10:26: 3
# Time Step:         Monthly
#
# _________________________________________________________________________________

 Operational Right Summary  ACFT

 ID = Opr_1              Name = Opr_Res_1_to_Target      Opr Type =    9   Admin # =         10.00000
 Source 1 = Res_1        Destination = 0                 Year On =     0   Year Off =  9999
YEAR     OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
AVG      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0

 Operational Right Summary  ACFT

 ID = Opr_2              Name = Opr_Res_1_to_Dem_2       Opr Type =    2   Admin # =          9.00000
 Source 1 = Res_1        Destination = Dem_2             Year On =     0   Year Off =  9999
YEAR     OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980   333.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   333.3
AVG    333.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   333.3

 Operational Right Summary  ACFT

 ID = Opr_3              Name = Opr_Res_1_to_ISF         Opr Type =    1   Admin # =          9.00000
 Source 1 = Res_1        Destination = ISF               Year On =     0   Year Off =  9999
YEAR     OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5  2427.5  2297.6  7052.6
AVG     25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5  2427.5  2297.6  7052.6
```

Example 4

```
# Exhibit 4.1
# *.rsp; response file for Statemod Example 4
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                      Name
# ______________________________________    _____________________________
Control                                   = ex4.ctl
River_Network                             = ..\ex2\ex2.rin
StreamGage_Station                        = ..\ex1\ex1.ris
Stream_Base_Monthly                       = ..\ex1\ex1.rim
Diversion_Station                         = ..\ex1\ex1.dds
Diversion_Right                           = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                  = ..\ex1\ex1.ddm
Reservoir_Station                         = ..\ex2\ex2.res
Reservoir_Right                           = ..\ex2\ex2.rer
Reservoir_Target_Monthly                  = ..\ex2\ex2.tam
Evaporation_Monthly                       = ..\ex2\ex2.eva
Instreamflow_Station                      = ..\ex1\ex1.ifs
Instreamflow_Right                        = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly        = ..\ex1\ex1.ifa
Operational_Right                         = ex4.opr
DelayTable_Monthly                        = ..\ex1\ex1.urm
OutputRequest                             = ..\ex2\ex2.out

# Exhibit 4.3
# *.opr; operating rules file for Statemod Example 4
#      This file lists the operating rules used in model simulation
#
#
#                    GUIDE TO COLUMN ENTRIES
#     ========================================
#          ID           ID number of operating rule that is used to separate operating rule output in *.xop file
#          Name       Name of operating rule - used for descriptive purposes only
#          Admin#     Administration number used to determine priority of operational water rights relative to other
operations and direct diversion, reservoir, instream flow, and well rights (see tabulation in *.xwr file)
#          # Str      Number of carrier structures, monthly on/off switches, or monthly volumetrics (flag telling
StateMod program the number of entries on next line)
#          On/Off     1 for ON and 0 for OFF
#          Dest ID    Destination of operating rule whose demand is to be met by simulating the operating rule
#          Dest Ac    Account at destination to be met by operating rule - typically 1 for a diversion structure and
account number for reservoir destination
#          Sou1 ID    ID number of primary source of water under which water right is being diverted in operating rule
- typically a water right, reservoir, or Plan structure
#          Sou1 Ac    Account of Sou1 - typically 1 for a diversion structure and account number for reservoir source
#          Sou2 ID    ID of Plan where reusable storage water or reusable ditch credits is accounted
#          Sou2 Ac    Percentage of Plan supplies available for operation
#          Type       Rule type corresponding with definitions in Chapter 4 of StateMod documentation
#          ReusePlan  ID of Plan where reusable return flows or diversions to storage are accounted
#          Div Type   'Diversion' indicates pro-rata diversion of source water right priority or exchange of reusable
credits to Dest1
#                        'Depletion' indicates pro-rata diversion of source water right priority consumptive use or
augmentation of upstream diversions at Dest1
#          OprLoss    Percentage of simulated diversion lost in carrier ditch (only applies to certain rules - see
StateMod documentation, Section 4.13)
#          Limit      Capacity limit for carrier structures different from capacity in .dds file (used to represent
constricted conveyance capacity for winter deliveries to reservoirs)
#          Comments   Description of rule type
#
# ID        Name                   NA                   Admin#   # Str  On/Off Dest Id     Dest Ac  Sou1 Id     Sou1
Ac  Sou2 Id     Sou2 Ac     Type ReusePlan    Div Type      OprLoss   Limit Comments
# ---------eb---------------------eb----------exxxxb----------eb------eb------e-b----------eb------e-b----------eb---
---e-b----------eb------eb------exb----------exb----------exb------eb------exb----------
Opr_1       Opr_Res_1_to_Target                        10.00000      0.       1 0                  0 Res_1
0 0                  0       9  NA           Diversion           0       0       0   9999 Reservoir Release to Target
```

```
Opr_2       Opr_Res_1_to_Dem_2                         9.00000      0.       1 Dem_2             1 Res_1
1 0              0       2  NA           NA                 0       0       0   9999 Reservoir Release to
Diversion
Opr_3       Opr_Res_1_to_ISF                           9.00000      0.       1 ISF               1 Res_1
2 0              0       1  NA           NA                 0       0       0   9999 Reservoir Release to
Instream Flow
Opr_4       Opr_Res_1_to_Dem_3                         9.00000      0.       1 Dem_3             1 Res_1
1 0              0       4  NA           NA                 0       0       0   9999 Reservoir Release to
Diversion by Exchange

#
# _________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex4.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:           9/24/ 8 12:45:23
# Time Step:         Monthly
#
# _________________________________________________________________________________

                               Water Budget  ACFT

               Stream                     From/To      From       From       Total                 From River
Well    Reservoir  Reservoir    Stream   Reservoir           To       SoilM
Year   Mo      Inflow      Return      GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change        SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
 1979 OCT       4000.0      1702.5         0.0         0.0         0.0      5702.5      6250.0         0.0         0.0
0.0         0.0       665.0     -1212.5         0.0         0.0      5702.5         0.0      2525.0         0.0
0.0         0.0
 1979 NOV       4000.0      3182.5         0.0         0.0         0.0      7182.5      6000.0         0.0         0.0
0.0         0.0      1324.5      -142.0         0.0         0.0      7182.5         0.0      2400.0         0.0
0.0         0.0
 1979 DEC       4000.0      3440.0         0.0         0.0         0.0      7440.0      6000.0         0.0         0.0
0.0         0.0      1440.0         0.0         0.0         0.0      7440.0         0.0      2400.0         0.0
0.0         0.0
 1980 JAN       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
 1980 FEB       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
 1980 MAR       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
24.7         0.0      1600.0       -24.7         0.0         0.0      7600.0         0.0      2424.7         0.0
0.0         0.0
 1980 APR       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
320.9         0.0      1600.0      -320.9         0.0         0.0      7600.0         0.0      2720.9         0.0
0.0         0.0
 1980 MAY      20000.0      3725.0         0.0         0.0         0.0     23725.0      6500.0         0.0         0.0
293.8         0.0      5225.0     11706.2         0.0         0.0     23725.0         0.0      2943.8         0.0
0.0         0.0
 1980 JUN      20000.0      3850.0         0.0         0.0         0.0     23850.0      6500.0         0.0         0.0
794.7         0.0      5350.0     11205.3         0.0         0.0     23850.0         0.0      3444.7         0.0
0.0         0.0
 1980 JUL       4000.0      3725.0         0.0         0.0         0.0      7725.0      6000.0         0.0         0.0
477.0         0.0      4027.5     -2779.5         0.0         0.0      7725.0         0.0      2877.0         0.0
0.0         0.0
 1980 AUG       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
371.5         0.0      4027.5     -2799.0         0.0         0.0      7600.0         0.0      2771.5         0.0
0.0         0.0
 1980 SEP       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
301.3         0.0      3897.6     -2598.9         0.0         0.0      7600.0         0.0      2701.3         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
 1980 Tot      80000.0     41225.0         0.0         0.0         0.0    121225.0     73250.0         0.0         0.0
2583.9         0.0     32357.0     13034.0         0.0         0.0    121225.0         0.0     32008.9         0.0
0.0         0.0

                               Water Budget  ACFT

               Stream                     From/To      From       From       Total                 From River
Well    Reservoir  Reservoir    Stream   Reservoir           To       SoilM
Year   Mo      Inflow      Return      GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change        SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
Ave   OCT       4000.0      1702.5         0.0         0.0         0.0      5702.5      6250.0         0.0         0.0
0.0         0.0       665.0     -1212.5         0.0         0.0      5702.5         0.0      2525.0         0.0
0.0         0.0
```

```
Ave   NOV      4000.0     3182.5         0.0         0.0         0.0     7182.5     6000.0         0.0         0.0
0.0         0.0     1324.5     -142.0         0.0         0.0     7182.5         0.0     2400.0         0.0
0.0         0.0
Ave   DEC      4000.0     3440.0         0.0         0.0         0.0     7440.0     6000.0         0.0         0.0
0.0         0.0     1440.0        0.0         0.0         0.0     7440.0         0.0     2400.0         0.0
0.0         0.0
Ave   JAN      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
0.0         0.0     1600.0        0.0         0.0         0.0     7600.0         0.0     2400.0         0.0
0.0         0.0
Ave   FEB      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
0.0         0.0     1600.0        0.0         0.0         0.0     7600.0         0.0     2400.0         0.0
0.0         0.0
Ave   MAR      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
24.7         0.0     1600.0      -24.7         0.0         0.0     7600.0         0.0     2424.7         0.0
0.0         0.0
Ave   APR      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
320.9         0.0     1600.0     -320.9         0.0         0.0     7600.0         0.0     2720.9         0.0
0.0         0.0
Ave   MAY     20000.0     3725.0         0.0         0.0         0.0    23725.0     6500.0         0.0         0.0
293.8         0.0     5225.0    11706.2         0.0         0.0    23725.0         0.0     2943.8         0.0
0.0         0.0
Ave   JUN     20000.0     3850.0         0.0         0.0         0.0    23850.0     6500.0         0.0         0.0
794.7         0.0     5350.0    11205.3         0.0         0.0    23850.0         0.0     3444.7         0.0
0.0         0.0
Ave   JUL      4000.0     3725.0         0.0         0.0         0.0     7725.0     6000.0         0.0         0.0
477.0         0.0     4027.5    -2779.5         0.0         0.0     7725.0         0.0     2877.0         0.0
0.0         0.0
Ave   AUG      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
371.5         0.0     4027.5    -2799.0         0.0         0.0     7600.0         0.0     2771.5         0.0
0.0         0.0
Ave   SEP      4000.0     3600.0         0.0         0.0         0.0     7600.0     6000.0         0.0         0.0
301.3         0.0     3897.6    -2598.9         0.0         0.0     7600.0         0.0     2701.3         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
Ave   Tot     80000.0    41225.0         0.0         0.0         0.0   121225.0    73250.0         0.0         0.0
2583.9        0.0    32357.0    13034.0         0.0         0.0   121225.0         0.0    32008.9         0.0
0.0         0.0
                                                                                                    0.0 (6)
                                                                                               ___________
                                                                                                   73250.0

  Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency
           + max (Resevoir Evaporation (Evap), 0.0).
        (2) Loss is not part of the Stream Water Balance.
            It is the portion of a diversion, well pumping
            and reservoir seepage that does not return to
            the stream
        (3) Pumping is not part of the Stream Balance.
            Its impact on the stream is included in the From River by Well and Well Depletion columns
        (4) Salvage is not part of the Stream Water Balance.
            It is the portion of well pumping that does not impact the stream
        (5) From Plan is water from a reuse plan.
        (6) Divert does not include diversions by an
            instream flow or a T&C plan. Also to avoid
            double accounting with reservoir storage it has
            reduced by:
              1       0. af/yr for Diverted to Storage.
              2       0. af/yr for a Diversion Carrier.
              3       0. af/yr for a Reservior Carrier.
              4       0. af/yr for a Plan Carrier.
                   0.af/yr Total

#
# _________________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex4.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:           9/24/ 8 12:45:22
# Time Step:         Monthly
#
# _________________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =        11
#
#
_____________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
```

```
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
            operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID                Type         Admin #  On/Off  Str ID #1    Str ID #2           Amount Right Name
Str Name #1                Str Name #2
#    (1) (2)                (3)            (4)     (5)  (6)          (7)                    (8) (9)
(10)                        (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

       1 Dem_1_WR_1          3         2.00000       1  Dem_1        -1              100.000 c M&I Demand _1
Municipal Demand _1
       2 Dem_2_WR_1          3         6.00000       1  Dem_2        -1               60.000 c Irrigation Demand _2
Irrigation Demand _2
       3 Dem_3_WR_1          3         7.00000       1  Dem_3        -1              100.000 c Irrigation Demand _3
Irrigation Demand _3
       4 ISF_WR_1            1         9.00000       1  ISF          -1               65.500 c Instream Flow 1
Instream Demand

       5 Opr_2             102         9.00000       1  Dem_2        -1               -1.000 x Opr_Res_1_to_Dem_2
Irrigation Demand _2
       6 Opr_3             101         9.00000       1  ISF          -1               -1.000 x Opr_Res_1_to_ISF
Instream Demand
       7 Opr_4             104         9.00000       1  -1           -1               -1.000 x Opr_Res_1_to_Dem_3

       8 Dem_4_WR_1          3        10.00000       1  Dem_4        -1              100.000 c Irrigation Demand _4
Irrigation Demand _4

       9 Opr_1             109        10.00000       1  -1           -1               -1.000 x Opr_Res_1_to_Target

      10 Res_1_WR_1          2        15.00000       1  Res_1        -1           100000.000 a Reservoir_1
Reservoir_1
      11 Dem_5_WR_1          3        15.00000       1  Dem_5        -1              100.000 c Irrigation Demand _5
Irrigation Demand _5

#
# __________________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex4.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:           9/24/ 8 12:45:19
# Time Step:         Monthly
#
# __________________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
```

```
                                        Demand             From River By                  From Carrier By
Carried                 ============== ==============================
Structure   River                  ============= ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
====================================== ========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3       1979  OCT  1000.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1          100.000
Dem_3       Dem_3       1979  NOV  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_3       Dem_3       1979  DEC  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_3       Dem_3       1980  JAN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_3       Dem_3       1980  FEB  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1          100.000
Dem_3       Dem_3       1980  MAR  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1          100.000
Dem_3       Dem_3       1980  APR  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1          100.000
Dem_3       Dem_3       1980  MAY  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1197.5 NA               -1.000
Dem_3       Dem_3       1980  JUN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1452.4 NA               -1.000
Dem_3       Dem_3       1980  JUL  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_3       Dem_3       1980  AUG  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_3       Dem_3       1980  SEP  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1          100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_3       Dem_3       1980  TOT 12000.0  6000.0 11000.0     0.0  1000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 12000.0     0.0     0.0  6000.0     0.0  6000.0     0.0     0.0 20000.0     0.0     0.0     0.0 20000.0
12000.0     0.0  8000.0  2649.9 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
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    STRUCTURE ID (0 = total)  : Dem_4              2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4        Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4        Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand             From River By                  From Carrier By
Carried                 ============== ==============================
Structure   River                  ============= ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
====================================== ========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
```

```
Dem_4       Dem_4       1979  OCT   500.0   250.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   250.0   250.0   125.0   125.0     0.0   125.0     0.0     0.0     0.0   250.0     0.0     0.0   250.0
250.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_4       Dem_4       1979  NOV   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1979  DEC   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  JAN   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  FEB   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  MAR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  APR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  MAY   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  1197.5 NA                -1.000
Dem_4       Dem_4       1980  JUN   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  1452.4 NA                -1.000
Dem_4       Dem_4       1980  JUL   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  AUG   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_4       Dem_4       1980  TOT  5500.0  2750.0  1250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1250.0  4250.0  2125.0   625.0     0.0   625.0     0.0  8000.0     0.0  5750.0     0.0     0.0 13750.0
1250.0     0.0 12500.0  2649.9 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
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    STRUCTURE ID (0 = total)  : Dem_5              -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand             From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
=================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
Dem_5       Dem_5       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
Dem_5       Dem_5       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
```

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Dem_5       Dem_5        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Dem_2            60.000
Dem_5       Dem_5        1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
Dem_5       Dem_5        1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
Dem_5       Dem_5        1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_5       Dem_5        1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0     0.0 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
PAGE NO.   4

    STRUCTURE ID (0 = total)  : Res_1            7501
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Reservoir_1
    RIVER LOCATION - FROM     : Res_1        Exist. Reservoir
    RIVER LOCATION - TO       : Res_1        Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                 _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.



Shortage                 Water Use
                                        Demand               From River By                   From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total          Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
===================================== =========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Res_1       Res_1        1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
1212.5     0.0  4212.5     0.0 ISF             100.000
Res_1       Res_1        1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0  -
142.0     0.0  3142.0     0.0 ISF             100.000
Res_1       Res_1        1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1        1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 Dem_2            60.000
```

```
Res_1       Res_1       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2302.5     0.0  5302.5     0.0 ISF            100.000
Res_1       Res_1       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2427.5     0.0  5427.5     0.0 ISF            100.000
Res_1       Res_1       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2297.6     0.0  5297.6     0.0 ISF            100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Res_1       Res_1       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
15618.0     0.0 44382.0     0.0 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
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    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2       Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2       Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ===============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total         Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2       1979  OCT  3000.0  1500.0  2666.7   333.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  4212.5     0.0     0.0     0.0     0.0  4212.5
3000.0     0.0  1212.5     0.0 Dem_1          100.000
Dem_2       Dem_2       1979  NOV  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3142.0     0.0     0.0     0.0     0.0  3142.0
3000.0     0.0   142.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1979  DEC  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  JAN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  FEB  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  MAR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  APR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  MAY  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA               -1.000
Dem_2       Dem_2       1980  JUN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA               -1.000
Dem_2       Dem_2       1980  JUL  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5302.5     0.0     0.0     0.0     0.0  5302.5
3000.0     0.0  2302.5     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  AUG  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5427.5     0.0     0.0     0.0     0.0  5427.5
3000.0     0.0  2427.5     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  SEP  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5297.6     0.0     0.0     0.0     0.0  5297.6
3000.0     0.0  2297.6     0.0 Hgate_Limit      -1.000
```

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___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_2       Dem_2        1980  TOT 36000.0 18000.0 35666.7   333.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 36000.0     0.0     0.0 18000.0     0.0 18000.0     0.0 44382.0     0.0     0.0     0.0     0.0 44382.0
36000.0     0.0  8382.0     0.0 NA               -1.000


    Gage  Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
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    RIVER LOCATION - FROM     : Riv_50       Confluence
    RIVER LOCATION - TO       : Riv_50       Confluence



Shortage                 Water Use
                                        Demand               From River By                   From Carrier By
Carried                 ============== ==============================
Structure   River                      ============== ==============================    From    ====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                       Station Balance
====================================== ==========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
NA          Riv_50       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1212.5     0.0    62.5     0.0     0.0  1275.0
0.0     0.0  1275.0     0.0 NA               -1.000
NA          Riv_50       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   642.0     0.0    62.5     0.0     0.0   704.5
0.0     0.0   704.5     0.0 NA               -1.000
NA          Riv_50       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4000.0     0.0   125.0     0.0     0.0  4125.0
0.0     0.0  4125.0  1197.5 NA               -1.000
NA          Riv_50       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4000.0     0.0   250.0     0.0     0.0  4250.0
0.0     0.0  4250.0  1452.4 NA               -1.000
NA          Riv_50       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2802.5     0.0   125.0     0.0     0.0  2927.5
0.0     0.0  2927.5     0.0 NA               -1.000
NA          Riv_50       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2927.5     0.0     0.0     0.0     0.0  2927.5
0.0     0.0  2927.5     0.0 NA               -1.000
NA          Riv_50       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2797.6     0.0     0.0     0.0     0.0  2797.6
0.0     0.0  2797.6     0.0 NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
NA          Riv_50       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 20882.0     0.0   625.0     0.0     0.0 21507.0
0.0     0.0 21507.0  2649.9 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
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    STRUCTURE ID (0 = total)  : Dem_1               5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
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      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand               From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                   ============= ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1275.0     0.0   750.0     0.0     0.0  2025.0
2000.0     0.0    25.0     0.0 NA                -1.000
Dem_1       Dem_1        1979  NOV  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   704.5     0.0  1500.0     0.0     0.0  2204.5
2000.0     0.0   204.5     0.0 NA                -1.000
Dem_1       Dem_1        1979  DEC  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1        1980  JAN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1        1980  FEB  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1        1980  MAR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1        1980  APR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1        1980  MAY  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4125.0     0.0  1500.0     0.0     0.0  5625.0
2000.0     0.0  3625.0  1197.5 NA                -1.000
Dem_1       Dem_1        1980  JUN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4250.0     0.0  1500.0     0.0     0.0  5750.0
2000.0     0.0  3750.0  1452.4 NA                -1.000
Dem_1       Dem_1        1980  JUL  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2927.5     0.0  1500.0     0.0     0.0  4427.5
2000.0     0.0  2427.5     0.0 NA                -1.000
Dem_1       Dem_1        1980  AUG  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2927.5     0.0  1500.0     0.0     0.0  4427.5
2000.0     0.0  2427.5     0.0 NA                -1.000
Dem_1       Dem_1        1980  SEP  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2797.6     0.0  1500.0     0.0     0.0  4297.6
2000.0     0.0  2297.6     0.0 NA                -1.000
___________ __________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_1       Dem_1        1980  TOT 24000.0  4800.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 24000.0     0.0     0.0  4800.0     0.0 19200.0     0.0 21507.0     0.0 17250.0     0.0     0.0 38757.0
24000.0     0.0 14757.0  2649.9 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
PAGE NO.   8

    STRUCTURE ID (0 = total)  : ISF             5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF         Top Instream Flow
    RIVER LOCATION - TO       : ISF.01      Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand               From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                   ============= ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
```

```
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF          1979  OCT  4027.5     0.0   640.0    25.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   665.0  3362.5     0.0     0.0     0.0   665.0     0.0    25.0     0.0   640.0     0.0     0.0   665.0
665.0     0.0   665.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1979  NOV  3897.6     0.0  1182.5   142.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1324.5  2573.1     0.0     0.0     0.0  1324.5     0.0   204.5     0.0  1120.0     0.0     0.0  1324.5
1324.5     0.0  1324.5     0.0 Hgate_Limit       -1.000
ISF         ISF          1979  DEC  4027.5     0.0  1440.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1440.0  2587.5     0.0     0.0     0.0  1440.0     0.0     0.0     0.0  1440.0     0.0     0.0  1440.0
1440.0     0.0  1440.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  JAN  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  FEB  3637.7     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2037.7     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  MAR  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  APR  3897.6     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2297.6     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  MAY  4027.5     0.0  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  3625.0     0.0  1600.0     0.0     0.0  5225.0
4027.5     0.0  5225.0  1197.5 NA                -1.000
ISF         ISF          1980  JUN  3897.6     0.0  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0  3750.0     0.0  1600.0     0.0     0.0  5350.0
3897.6     0.0  5350.0  1452.4 NA                -1.000
ISF         ISF          1980  JUL  4027.5     0.0  1725.0  2302.5     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  2427.5     0.0  1600.0     0.0     0.0  4027.5
4027.5     0.0  4027.5     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  AUG  4027.5     0.0  1600.0  2427.5     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  2427.5     0.0  1600.0     0.0     0.0  4027.5
4027.5     0.0  4027.5     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  SEP  3897.6     0.0  1600.0  2297.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0  2297.6     0.0  1600.0     0.0     0.0  3897.6
3897.6     0.0  3897.6     0.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
ISF         ISF          1980  TOT 47420.5     0.0 22512.6  7194.5     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 29707.1 17713.4     0.0     0.0     0.0 29707.1     0.0 14757.0     0.0 17600.0     0.0     0.0 32357.0
29707.1     0.0 32357.0  2649.9 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
PAGE NO.   9

    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Bottom Instream Flow
    RIVER LOCATION - FROM     : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


Shortage                 Water Use
                                       Demand              From River By                     From Carrier By
Carried                 ============== ===============================
Structure   River                   ============== ===============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   665.0     0.0     0.0     0.0     0.0   665.0
0.0     0.0   665.0     0.0 NA              -1.000
Baseflow    ISF.01       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1324.5     0.0     0.0     0.0     0.0  1324.5
0.0     0.0  1324.5     0.0 NA              -1.000
Baseflow    ISF.01       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1440.0     0.0     0.0     0.0     0.0  1440.0
0.0     0.0  1440.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
```

```
Baseflow    ISF.01       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5225.0     0.0     0.0     0.0     0.0  5225.0
0.0     0.0  5225.0  1197.5 NA              -1.000
Baseflow    ISF.01       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5350.0     0.0     0.0     0.0     0.0  5350.0
0.0     0.0  5350.0  1452.4 NA              -1.000
Baseflow    ISF.01       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5
0.0     0.0  4027.5     0.0 NA              -1.000
Baseflow    ISF.01       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5
0.0     0.0  4027.5     0.0 NA              -1.000
Baseflow    ISF.01       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6
0.0     0.0  3897.6     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Baseflow    ISF.01       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 32357.0     0.0     0.0     0.0     0.0 32357.0
0.0     0.0 32357.0  2649.9 NA              -1.000

#
# _________________________________________________________________________________
# *.xre       Reservoir Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex4.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:           9/24/ 8 12:45:19
# Time Step:         Monthly
#
# _________________________________________________________________________________

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
PAGE NO.   1

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  0  100000.; where account 0 is the total
    RESERVOIR OWNER           : Total
    RIVER LOCATION            : Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.

                                                                                                     From Storage
to                                                                 Station Balance
                                                      From River by           From Carrier by
_______________________                                          Targt_0     BOM _____________________________________
                            Initial _______________________________ _______________________  Total   River   River
Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                   Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For Exc
for Use Release    Evap  Spill Content  Limit   Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)     NA     (-)     (-)
(-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                               ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)    (11)
(12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______

Res_1           0 1979  OCT 50000.0   145.8     0.0     0.0     0.0     0.0     0.0     0.0   145.8   358.3  1000.0
0.0  1358.3     0.0     0.0 48787.5100000.0 50000.0  3000.0  1358.3   145.8     0.0  4212.5
Res_1           0 1979  NOV 48787.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   142.0     0.0
0.0   142.0     0.0     0.0 48645.5100000.0 51212.5  3000.0   142.0     0.0     0.0  3142.0
Res_1           0 1979  DEC 48645.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48645.5100000.0 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  JAN 48645.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48645.5100000.0 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  FEB 48645.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48645.5100000.0 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  MAR 48645.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    24.7     0.0 48620.8100000.0 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  APR 48620.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   320.9     0.0 48299.9100000.0 51212.5  3000.0     0.0     0.0     0.0  3000.0
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Res_1          0 1980  MAY 48299.9 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0
0.0     0.0   293.8     0.0 60006.1100000.0 51212.5 15000.0     0.0 12000.0     0.0  3000.0
Res_1          0 1980  JUN 60006.1 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0
0.0     0.0   794.7     0.0 71211.4100000.0 39212.5 15000.0     0.0 12000.0     0.0  3000.0
Res_1          0 1980  JUL 71211.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5     0.0
0.0  2302.5   477.0     0.0 68431.9100000.0 27212.5  3000.0  2302.5     0.0     0.0  5302.5
Res_1          0 1980  AUG 68431.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2427.5     0.0
0.0  2427.5   371.5     0.0 65632.9100000.0 27212.5  3000.0  2427.5     0.0     0.0  5427.5
Res_1          0 1980  SEP 65632.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2297.6     0.0
0.0  2297.6   301.3     0.0 63034.0100000.0 27212.5  3000.0  2297.6     0.0     0.0  5297.6
____________ ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  TOT 50000.0 24145.8     0.0     0.0     0.0     0.0     0.0     0.0 24145.8  7527.9  1000.0
0.0  8527.9  2583.9     0.0 63034.0    -1.0    -1.0 60000.0  8527.9 24145.8     0.0 44382.0


   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
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    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  1   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_1
    RIVER LOCATION            : Exist. Reservoir

                                                                                                     From Storage
to                                                                 Station Balance
                                             From River by               From Carrier by
_______________________                                 Targt_0     BOM _______________________________________
                            Initial _______________________________ _______________________ Total   River   River
Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                   Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For Exc
for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-)
(-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                               ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)    (11)
(12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
____________ ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          1 1979  OCT 49975.0     3.9     0.0     0.0     0.0     0.0     0.0     0.0     3.9   333.3  1000.0
0.0  1333.3     0.0     0.0 48645.5 50000.0 50000.0  3000.0  1358.3   145.8     0.0  4212.5
Res_1          1 1979  NOV 48645.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48645.5 51212.5 51212.5  3000.0   142.0     0.0     0.0  3142.0
Res_1          1 1979  DEC 48645.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48645.5 51354.5 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1          1 1980  JAN 48645.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48645.5 51354.5 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1          1 1980  FEB 48645.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48645.5 51354.5 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1          1 1980  MAR 48645.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    24.7     0.0 48620.8 51354.5 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1          1 1980  APR 48620.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   320.9     0.0 48299.9 51379.2 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1          1 1980  MAY 48299.9   394.6     0.0     0.0     0.0     0.0     0.0     0.0   394.6     0.0     0.0
0.0     0.0   237.3     0.0 48457.2 51700.1 51212.5 15000.0     0.0 12000.0     0.0  3000.0
Res_1          1 1980  JUN 48457.2   462.9     0.0     0.0     0.0     0.0     0.0     0.0   462.9     0.0     0.0
0.0     0.0   539.9     0.0 48380.2 39993.9 39212.5 15000.0     0.0 12000.0     0.0  3000.0
Res_1          1 1980  JUL 48380.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   334.9     0.0 48045.3 28788.6 27212.5  3000.0  2302.5     0.0     0.0  5302.5
Res_1          1 1980  AUG 48045.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   270.4     0.0 47774.9 31568.1 27212.5  3000.0  2427.5     0.0     0.0  5427.5
Res_1          1 1980  SEP 47774.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   227.3     0.0 47547.6 34367.1 27212.5  3000.0  2297.6     0.0     0.0  5297.6
____________ ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          1 1980  TOT 49975.0   861.4     0.0     0.0     0.0     0.0     0.0     0.0   861.4   333.3  1000.0
0.0  1333.3  1955.4     0.0 47547.6    -1.0    -1.0 60000.0  8527.9 24145.8     0.0 44382.0

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex4.* data set
PAGE NO.   3

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  2   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_2
    RIVER LOCATION            : Exist. Reservoir

                                                                                                     From Storage
to                                                                 Station Balance
                                             From River by               From Carrier by
_______________________                                 Targt_0     BOM _______________________________________
                            Initial _______________________________ _______________________ Total   River   River
Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                   Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For Exc
for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
```

```
ID          Acc Year   Mo      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-)
(-)      NA    (-)    (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                             ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)    (11)
(12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________ ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1979  OCT    25.0   142.0     0.0     0.0     0.0     0.0     0.0     0.0   142.0    25.0     0.0
0.0    25.0    0.0    0.0   142.0 50000.0 50000.0  3000.0  1358.3   145.8     0.0  4212.5
Res_1          2 1979  NOV   142.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   142.0     0.0
0.0   142.0    0.0    0.0     0.0 51212.5 51212.5  3000.0   142.0     0.0     0.0  3142.0
Res_1          2 1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0    0.0     0.0 51354.5 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1          2 1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0    0.0     0.0 51354.5 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1          2 1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0    0.0     0.0 51354.5 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1          2 1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0    0.0     0.0 51354.5 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1          2 1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0    0.0     0.0 51379.2 51212.5  3000.0     0.0     0.0     0.0  3000.0
Res_1          2 1980  MAY     0.0 11605.4     0.0     0.0     0.0     0.0     0.0     0.0 11605.4     0.0     0.0
0.0     0.0   56.5    0.0 11548.8 51700.1 51212.5 15000.0     0.0 12000.0     0.0  3000.0
Res_1          2 1980  JUN 11548.8 11537.1     0.0     0.0     0.0     0.0     0.0     0.0 11537.1     0.0     0.0
0.0     0.0  254.8    0.0 22831.1 39993.9 39212.5 15000.0     0.0 12000.0     0.0  3000.0
Res_1          2 1980  JUL 22831.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5     0.0
0.0  2302.5  142.1    0.0 20386.6 28788.6 27212.5  3000.0  2302.5     0.0     0.0  5302.5
Res_1          2 1980  AUG 20386.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2427.5     0.0
0.0  2427.5  101.1    0.0 17858.0 31568.1 27212.5  3000.0  2427.5     0.0     0.0  5427.5
Res_1          2 1980  SEP 17858.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2297.6     0.0
0.0  2297.6   74.0    0.0 15486.4 34367.1 27212.5  3000.0  2297.6     0.0     0.0  5297.6
___________ ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1980  TOT    25.0 23284.5     0.0     0.0     0.0     0.0     0.0     0.0 23284.5  7194.5     0.0
0.0  7194.5  628.5    0.0 15486.4    -1.0    -1.0 60000.0  8527.9 24145.8     0.0 44382.0
#
# ________________________________________________________________________________
# *.xop       Operational Right Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex4.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          9/24/ 8 12:45:19
# Time Step:         Monthly
#
# ________________________________________________________________________________

 Operational Right Summary  ACFT

 ID = Opr_1             Name = Opr_Res_1_to_Target      Opr Type =    9   Admin # =        10.00000
 Source 1 = Res_1       Destination = 0                 Year On =     0   Year Off =  9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
AVG      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0

 Operational Right Summary  ACFT

 ID = Opr_2             Name = Opr_Res_1_to_Dem_2       Opr Type =    2   Admin # =         9.00000
 Source 1 = Res_1       Destination = Dem_2             Year On =     0   Year Off =  9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980   333.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   333.3
AVG    333.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   333.3

 Operational Right Summary  ACFT

 ID = Opr_3             Name = Opr_Res_1_to_ISF         Opr Type =    1   Admin # =         9.00000
 Source 1 = Res_1       Destination = ISF               Year On =     0   Year Off =  9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980    25.0   142.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5  2427.5  2297.6  7194.5
AVG     25.0   142.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5  2427.5  2297.6  7194.5

 Operational Right Summary  ACFT

 ID = Opr_4             Name = Opr_Res_1_to_Dem_3       Opr Type =    4   Admin # =         9.00000
 Source 1 = Res_1       Destination = Dem_3             Year On =     0   Year Off =  9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1000.0
AVG   1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1000.0
```

Example 5

```
# Exhibit 5.1
# *.rsp; response file for Statemod Example 5
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                        Name
# ______________________________________   _____________________________
Control                                    = ex5.ctl
River_Network                              = ..\ex2\ex2.rin
StreamGage_Station                         = ..\ex1\ex1.ris
Stream_Base_Monthly                        = ..\ex1\ex1.rim
Diversion_Station                          = ..\ex1\ex1.dds
Diversion_Right                            = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                   = ..\ex1\ex1.ddm
Reservoir_Station                          = ..\ex2\ex2.res
Reservoir_Right                            = ..\ex2\ex2.rer
Reservoir_Target_Monthly                   = ..\ex2\ex2.tam
Evaporation_Monthly                        = ..\ex2\ex2.eva
Instreamflow_Station                       = ..\ex1\ex1.ifs
Instreamflow_Right                         = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly         = ..\ex1\ex1.ifa
Operational_Right                          = ex5.opr
DelayTable_Monthly                         = ..\ex1\ex1.urm
OutputRequest                              = ..\ex2\ex2.out

# Exhibit 5.3
# *.opr; operating rules file for Statemod Example 5
#      This file lists the operating rules used in model simulation
#
#
#                     GUIDE TO COLUMN ENTRIES
#     ========================================
#          ID           ID number of operating rule that is used to separate operating rule output in *.xop file
#          Name       Name of operating rule - used for descriptive purposes only
#          Admin#     Administration number used to determine priority of operational water rights relative to other
operations and direct diversion, reservoir, instream flow, and well rights (see tabulation in *.xwr file)
#          # Str      Number of carrier structures, monthly on/off switches, or monthly volumetrics (flag telling
StateMod program the number of entries on next line)
#          On/Off     1 for ON and 0 for OFF
#          Dest ID    Destination of operating rule whose demand is to be met by simulating the operating rule
#          Dest Ac    Account at destination to be met by operating rule - typically 1 for a diversion structure and
account number for reservoir destination
#          Sou1 ID    ID number of primary source of water under which water right is being diverted in operating rule
- typically a water right, reservoir, or Plan structure
#          Sou1 Ac    Account of Sou1 - typically 1 for a diversion structure and account number for reservoir source
#          Sou2 ID    ID of Plan where reusable storage water or reusable ditch credits is accounted
#          Sou2 Ac    Percentage of Plan supplies available for operation
#          Type       Rule type corresponding with definitions in Chapter 4 of StateMod documentation
#          ReusePlan  ID of Plan where reusable return flows or diversions to storage are accounted
#          Div Type   'Diversion' indicates pro-rata diversion of source water right priority or exchange of reusable
credits to Dest1
#                        'Depletion' indicates pro-rata diversion of source water right priority consumptive use or
augmentation of upstream diversions at Dest1
#          OprLoss    Percentage of simulated diversion lost in carrier ditch (only applies to certain rules - see
StateMod documentation, Section 4.13)
#          Limit      Capacity limit for carrier structures different from capacity in .dds file (used to represent
constricted conveyance capacity for winter deliveries to reservoirs)
#          Comments   Description of rule type
#
# ID        Name                   NA                   Admin#    # Str  On/Off Dest Id     Dest Ac  Sou1 Id     Sou1
Ac  Sou2 Id     Sou2 Ac     Type ReusePlan    Div Type      OprLoss   Limit Comments
# ---------eb----------------------eb----------exxxxb----------eb------eb------e-b----------eb------e-b----------eb---
---e-b----------eb------eb------exb----------exb----------exb------eb------exb----------
Opr_1       Opr_Res_1_to_Target                       10.00000      0.       1 0                    0 Res_1
0 0                0       9  NA           Diversion           0       0       0   9999 Reservoir Release to Target
Opr_2       Opr_Res_1_to_Dem_2                         9.00000      0.       1 Dem_2                1 Res_1
1 0                0       2  NA           NA                  0       0       0   9999 Reservoir Release to
Diversion
```

```
Opr_3       Opr_Res_1_to_ISF                          9.00000      0.       1 ISF                1 Res_1
2 0               0       1  NA           NA                0       0       0   9999 Reservoir Release to
Instream Flow
Opr_4       Opr_Res_1_to_Dem_3                        9.00000      0.       1 Dem_3              1 Res_1
1 0               0       3  NA           NA                0       0       0   9999 Reservoir Release to
Diversion by Carrier

#
# ________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex5.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 10:58: 7
# Time Step:         Monthly
#
# ________________________________________________________________________________

                               Water Budget  ACFT

               Stream                    From/To      From       From       Total                From River
Well    Reservoir  Reservoir    Stream   Reservoir           To       SoilM
Year   Mo      Inflow      Return      GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change        SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
 1979 OCT       4000.0      1751.1         0.0         0.0         0.0      5751.1      6444.4         0.0         0.0
0.0         0.0       665.0     -1358.3         0.0         0.0      5751.1         0.0      2622.2         0.0
0.0         0.0
 1979 NOV       4000.0      3231.1         0.0         0.0         0.0      7231.1      6000.0         0.0         0.0
0.0         0.0      1231.1         0.0         0.0         0.0      7231.1         0.0      2400.0         0.0
0.0         0.0
 1979 DEC       4000.0      3440.0         0.0         0.0         0.0      7440.0      6000.0         0.0         0.0
0.0         0.0      1440.0         0.0         0.0         0.0      7440.0         0.0      2400.0         0.0
0.0         0.0
 1980 JAN       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
 1980 FEB       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
 1980 MAR       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
24.7         0.0      1600.0       -24.7         0.0         0.0      7600.0         0.0      2424.7         0.0
0.0         0.0
 1980 APR       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
320.9         0.0      1600.0      -320.9         0.0         0.0      7600.0         0.0      2720.9         0.0
0.0         0.0
 1980 MAY      20000.0      3725.0         0.0         0.0         0.0     23725.0      6500.0         0.0         0.0
293.8         0.0      5225.0     11706.2         0.0         0.0     23725.0         0.0      2943.8         0.0
0.0         0.0
 1980 JUN      20000.0      3850.0         0.0         0.0         0.0     23850.0      6500.0         0.0         0.0
794.7         0.0      5350.0     11205.3         0.0         0.0     23850.0         0.0      3444.7         0.0
0.0         0.0
 1980 JUL       4000.0      3725.0         0.0         0.0         0.0      7725.0      6000.0         0.0         0.0
477.0         0.0      4027.5     -2779.5         0.0         0.0      7725.0         0.0      2877.0         0.0
0.0         0.0
 1980 AUG       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
371.5         0.0      4027.5     -2799.0         0.0         0.0      7600.0         0.0      2771.5         0.0
0.0         0.0
 1980 SEP       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
301.3         0.0      3897.6     -2598.9         0.0         0.0      7600.0         0.0      2701.3         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
 1980 Tot      80000.0     41322.2         0.0         0.0         0.0    121322.2     73444.4         0.0         0.0
2583.8         0.0     32263.7     13030.3         0.0         0.0    121322.2         0.0     32106.0         0.0
0.0         0.0

                               Water Budget  ACFT

               Stream                    From/To      From       From       Total                From River
Well    Reservoir  Reservoir    Stream   Reservoir           To       SoilM
Year   Mo      Inflow      Return      GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change        SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
Ave   OCT       4000.0      1751.1         0.0         0.0         0.0      5751.1      6444.4         0.0         0.0
0.0         0.0       665.0     -1358.3         0.0         0.0      5751.1         0.0      2622.2         0.0
0.0         0.0
Ave   NOV       4000.0      3231.1         0.0         0.0         0.0      7231.1      6000.0         0.0         0.0
0.0         0.0      1231.1         0.0         0.0         0.0      7231.1         0.0      2400.0         0.0
0.0         0.0
```

```
Ave   DEC       4000.0      3440.0         0.0         0.0         0.0      7440.0      6000.0         0.0         0.0
0.0         0.0      1440.0         0.0         0.0         0.0      7440.0         0.0      2400.0         0.0
0.0         0.0
Ave   JAN       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
Ave   FEB       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
Ave   MAR       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
24.7         0.0      1600.0       -24.7         0.0         0.0      7600.0         0.0      2424.7         0.0
0.0         0.0
Ave   APR       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
320.9         0.0      1600.0      -320.9         0.0         0.0      7600.0         0.0      2720.9         0.0
0.0         0.0
Ave   MAY      20000.0      3725.0         0.0         0.0         0.0     23725.0      6500.0         0.0         0.0
293.8         0.0      5225.0     11706.2         0.0         0.0     23725.0         0.0      2943.8         0.0
0.0         0.0
Ave   JUN      20000.0      3850.0         0.0         0.0         0.0     23850.0      6500.0         0.0         0.0
794.7         0.0      5350.0     11205.3         0.0         0.0     23850.0         0.0      3444.7         0.0
0.0         0.0
Ave   JUL       4000.0      3725.0         0.0         0.0         0.0      7725.0      6000.0         0.0         0.0
477.0         0.0      4027.5     -2779.5         0.0         0.0      7725.0         0.0      2877.0         0.0
0.0         0.0
Ave   AUG       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
371.5         0.0      4027.5     -2799.0         0.0         0.0      7600.0         0.0      2771.5         0.0
0.0         0.0
Ave   SEP       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
301.3         0.0      3897.6     -2598.9         0.0         0.0      7600.0         0.0      2701.3         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
Ave   Tot      80000.0     41322.2         0.0         0.0         0.0    121322.2     73444.4         0.0         0.0
2583.8         0.0     32263.7     13030.3         0.0         0.0    121322.2         0.0     32106.0         0.0
0.0         0.0
                                                                                                         0.0 (6)
                                                                                                 ___________
                                                                                                     73444.4

  Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency
           + max (Resevoir Evaporation (Evap), 0.0).
        (2) Loss is not part of the Stream Water Balance.
            It is the portion of a diversion, well pumping
            and reservoir seepage that does not return to
            the stream
        (3) Pumping is not part of the Stream Balance.
            Its impact on the stream is included in the From River by Well and Well Depletion columns
        (4) Salvage is not part of the Stream Water Balance.
            It is the portion of well pumping that does not impact the stream
        (5) From Plan is water from a reuse plan.
        (6) Divert does not include diversions by an
            instream flow or a T&C plan. Also to avoid
            double accounting with reservoir storage it has
            reduced by:
              1       0. af/yr for Diverted to Storage.
              2       0. af/yr for a Diversion Carrier.
              3       0. af/yr for a Reservior Carrier.
              4       0. af/yr for a Plan Carrier.
                      0. af/yr Total

#
# _______________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex5.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 10:58:10
# Time Step:         Monthly
#
# _______________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =         11
#
#
_____________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
```

```
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
            operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID                Type         Admin #  On/Off  Str ID #1    Str ID #2           Amount Right Name
Str Name #1                Str Name #2
#    (1) (2)                (3)             (4)     (5)  (6)          (7)                    (8) (9)
(10)                        (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

       1 Dem_1_WR_1          3        2.00000       1  Dem_1        -1               100.000 c M&I Demand _1
Municipal Demand _1
       2 Dem_2_WR_1          3        6.00000       1  Dem_2        -1                60.000 c Irrigation Demand _2
Irrigation Demand _2
       3 Dem_3_WR_1          3        7.00000       1  Dem_3        -1               100.000 c Irrigation Demand _3
Irrigation Demand _3
       4 ISF_WR_1            1        9.00000       1  ISF          -1                65.500 c Instream Flow 1
Instream Demand

       5 Opr_2             102        9.00000       1  Dem_2        -1                -1.000 x Opr_Res_1_to_Dem_2
Irrigation Demand _2
       6 Opr_3             101        9.00000       1  ISF          -1                -1.000 x Opr_Res_1_to_ISF
Instream Demand
       7 Opr_4             103        9.00000       1  -1           -1                -1.000 x Opr_Res_1_to_Dem_3

       8 Dem_4_WR_1          3       10.00000       1  Dem_4        -1               100.000 c Irrigation Demand _4
Irrigation Demand _4

       9 Opr_1             109       10.00000       1  -1           -1                -1.000 x Opr_Res_1_to_Target

      10 Res_1_WR_1          2       15.00000       1  Res_1        -1            100000.000 a Reservoir_1
Reservoir_1
      11 Dem_5_WR_1          3       15.00000       1  Dem_5        -1               100.000 c Irrigation Demand _5
Irrigation Demand _5

#
# ________________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex5.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 10:58: 2
# Time Step:         Monthly
#
# ________________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                  Water Use
                                         Demand               From River By                      From Carrier By
Carried                  ============= ==============================
```

```
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
===================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3        1979  OCT  1000.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0  1000.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
0.0     0.0  1000.0     0.0 Dem_1            100.000
Dem_3       Dem_3        1979  NOV  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1979  DEC  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  JAN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  FEB  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1            100.000
Dem_3       Dem_3        1980  MAR  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1            100.000
Dem_3       Dem_3        1980  APR  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1            100.000
Dem_3       Dem_3        1980  MAY  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1197.5 NA                -1.000
Dem_3       Dem_3        1980  JUN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1452.4 NA                -1.000
Dem_3       Dem_3        1980  JUL  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  AUG  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  SEP  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1            100.000
___________ __________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_3       Dem_3        1980  TOT 12000.0  6000.0 11000.0     0.0     0.0     0.0     0.0     0.0  1000.0     0.0
0.0     0.0 12000.0     0.0     0.0  6000.0     0.0  6000.0     0.0     0.0 20000.0     0.0     0.0     0.0 20000.0
11000.0     0.0  9000.0  2649.9 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
PAGE NO.   2

    STRUCTURE ID (0 = total)  : Dem_4              2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4        Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4        Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                          Demand             From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
===================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_4       Dem_4        1979  OCT   500.0   250.0   444.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   444.4    55.6    27.8   222.2     0.0   222.2     0.0  1000.0     0.0   250.0     0.0     0.0  1250.0
444.4     0.0   805.6     0.0 ISF              100.000
```

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Dem_4       Dem_4       1979  NOV   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1979  DEC   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  JAN   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  FEB   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  MAR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  APR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  MAY   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  1197.5 NA              -1.000
Dem_4       Dem_4       1980  JUN   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  1452.4 NA              -1.000
Dem_4       Dem_4       1980  JUL   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  AUG   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_4       Dem_4       1980  TOT  5500.0  2750.0  1444.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1444.4  4055.6  2027.8   722.2     0.0   722.2     0.0  9000.0     0.0  5750.0     0.0     0.0 14750.0
1444.4     0.0 13305.6  2649.9 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
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    STRUCTURE ID (0 = total)  : Dem_5              -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand             From River By                  From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU            To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
Dem_5       Dem_5       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
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Dem_5       Dem_5       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Dem_5       Dem_5       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Dem_5       Dem_5       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Dem_2           60.000
Dem_5       Dem_5       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Dem_2           60.000
Dem_5       Dem_5       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF            100.000
Dem_5       Dem_5       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF            100.000
Dem_5       Dem_5       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF            100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_5       Dem_5       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0     0.0 NA              -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
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    STRUCTURE ID (0 = total)  : Res_1            7501
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Reservoir_1
    RIVER LOCATION - FROM     : Res_1        Exist. Reservoir
    RIVER LOCATION - TO       : Res_1        Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.



Shortage                 Water Use
                                         Demand               From River By                     From Carrier By
Carried                ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
====================================== =============================================
Reach   Return Well    From/To River    River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow   Divert By Well Outflow Flow  Location Right
Res_1       Res_1       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0  -
358.3     0.0  3358.3     0.0 ISF            100.000
Res_1       Res_1       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 Dem_2           60.000
Res_1       Res_1       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 Dem_2           60.000
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Res_1       Res_1       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2302.5     0.0  5302.5     0.0 ISF             100.000
Res_1       Res_1       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2427.5     0.0  5427.5     0.0 ISF             100.000
Res_1       Res_1       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2297.6     0.0  5297.6     0.0 ISF             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Res_1       Res_1       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
16614.1     0.0 43385.9     0.0 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
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    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2        Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2        Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    ====================
Exchange  From  Total   Total    CU            To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
==================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2       1979  OCT  3000.0  1500.0  2666.7   333.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3358.3     0.0     0.0     0.0     0.0  3358.3
3000.0     0.0   358.3     0.0 Dem_1           100.000
Dem_2       Dem_2       1979  NOV  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1979  DEC  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  JAN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  FEB  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  MAR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  APR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  MAY  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA               -1.000
Dem_2       Dem_2       1980  JUN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA               -1.000
Dem_2       Dem_2       1980  JUL  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5302.5     0.0     0.0     0.0     0.0  5302.5
3000.0     0.0  2302.5     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  AUG  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5427.5     0.0     0.0     0.0     0.0  5427.5
3000.0     0.0  2427.5     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  SEP  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5297.6     0.0     0.0     0.0     0.0  5297.6
3000.0     0.0  2297.6     0.0 Hgate_Limit      -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
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Dem_2       Dem_2       1980  TOT 36000.0 18000.0 35666.7   333.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 36000.0     0.0     0.0 18000.0     0.0 18000.0     0.0 43385.9     0.0     0.0     0.0     0.0 43385.9
36000.0     0.0  7385.9     0.0 NA              -1.000
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    Gage  Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
PAGE NO.   6

    RIVER LOCATION - FROM     : Riv_50       Confluence
    RIVER LOCATION - TO       : Riv_50       Confluence
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Shortage                 Water Use
                                        Demand               From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    ====================
Exchange  From  Total   Total    CU             To    Total          Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
==================================== =============================================
Reach   Return Well    From/To River    River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
NA          Riv_50      1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1163.9     0.0   111.1     0.0     0.0  1275.0
0.0     0.0  1275.0     0.0 NA              -1.000
NA          Riv_50      1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0   111.1     0.0     0.0   611.1
0.0     0.0   611.1     0.0 NA              -1.000
NA          Riv_50      1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
NA          Riv_50      1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4000.0     0.0   125.0     0.0     0.0  4125.0
0.0     0.0  4125.0  1197.5 NA              -1.000
NA          Riv_50      1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4000.0     0.0   250.0     0.0     0.0  4250.0
0.0     0.0  4250.0  1452.4 NA              -1.000
NA          Riv_50      1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2802.5     0.0   125.0     0.0     0.0  2927.5
0.0     0.0  2927.5     0.0 NA              -1.000
NA          Riv_50      1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2927.5     0.0     0.0     0.0     0.0  2927.5
0.0     0.0  2927.5     0.0 NA              -1.000
NA          Riv_50      1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2797.6     0.0     0.0     0.0     0.0  2797.6
0.0     0.0  2797.6     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
NA          Riv_50      1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 20691.5     0.0   722.2     0.0     0.0 21413.7
0.0     0.0 21413.7  2649.9 NA              -1.000
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   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
PAGE NO.   7

    STRUCTURE ID (0 = total)  : Dem_1              5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.
```

```
Shortage                 Water Use
                                        Demand               From River By                        From Carrier By
Carried                 ============== ==============================
Structure   River                   ============= ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                               Station Balance
==================================== ========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1275.0     0.0   750.0     0.0     0.0  2025.0
2000.0     0.0    25.0     0.0 NA              -1.000
Dem_1       Dem_1        1979  NOV  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   611.1     0.0  1500.0     0.0     0.0  2111.1
2000.0     0.0   111.1     0.0 NA              -1.000
Dem_1       Dem_1        1979  DEC  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  JAN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  FEB  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  MAR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  APR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  MAY  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4125.0     0.0  1500.0     0.0     0.0  5625.0
2000.0     0.0  3625.0  1197.5 NA              -1.000
Dem_1       Dem_1        1980  JUN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4250.0     0.0  1500.0     0.0     0.0  5750.0
2000.0     0.0  3750.0  1452.4 NA              -1.000
Dem_1       Dem_1        1980  JUL  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2927.5     0.0  1500.0     0.0     0.0  4427.5
2000.0     0.0  2427.5     0.0 NA              -1.000
Dem_1       Dem_1        1980  AUG  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2927.5     0.0  1500.0     0.0     0.0  4427.5
2000.0     0.0  2427.5     0.0 NA              -1.000
Dem_1       Dem_1        1980  SEP  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2797.6     0.0  1500.0     0.0     0.0  4297.6
2000.0     0.0  2297.6     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_1       Dem_1        1980  TOT 24000.0  4800.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 24000.0     0.0     0.0  4800.0     0.0 19200.0     0.0 21413.7     0.0 17250.0     0.0     0.0 38663.7
24000.0     0.0 14663.7  2649.9 NA              -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
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    STRUCTURE ID (0 = total)  : ISF              5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF          Top Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand               From River By                        From Carrier By
Carried                 ============== ==============================
Structure   River                   ============= ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                               Station Balance
```

```
===================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF          1979  OCT  4027.5     0.0   640.0    25.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   665.0  3362.5     0.0     0.0     0.0   665.0     0.0    25.0     0.0   640.0     0.0     0.0   665.0
665.0     0.0   665.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1979  NOV  3897.6     0.0  1231.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1231.1  2666.5     0.0     0.0     0.0  1231.1     0.0   111.1     0.0  1120.0     0.0     0.0  1231.1
1231.1     0.0  1231.1     0.0 Hgate_Limit       -1.000
ISF         ISF          1979  DEC  4027.5     0.0  1440.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1440.0  2587.5     0.0     0.0     0.0  1440.0     0.0     0.0     0.0  1440.0     0.0     0.0  1440.0
1440.0     0.0  1440.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  JAN  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  FEB  3637.7     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2037.7     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  MAR  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  APR  3897.6     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2297.6     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  MAY  4027.5     0.0  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  3625.0     0.0  1600.0     0.0     0.0  5225.0
4027.5     0.0  5225.0  1197.5 NA                -1.000
ISF         ISF          1980  JUN  3897.6     0.0  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0  3750.0     0.0  1600.0     0.0     0.0  5350.0
3897.6     0.0  5350.0  1452.4 NA                -1.000
ISF         ISF          1980  JUL  4027.5     0.0  1725.0  2302.5     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  2427.5     0.0  1600.0     0.0     0.0  4027.5
4027.5     0.0  4027.5     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  AUG  4027.5     0.0  1600.0  2427.5     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  2427.5     0.0  1600.0     0.0     0.0  4027.5
4027.5     0.0  4027.5     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  SEP  3897.6     0.0  1600.0  2297.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0  2297.6     0.0  1600.0     0.0     0.0  3897.6
3897.6     0.0  3897.6     0.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
ISF         ISF          1980  TOT 47420.5     0.0 22561.2  7052.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 29613.8 17806.8     0.0     0.0     0.0 29613.8     0.0 14663.7     0.0 17600.0     0.0     0.0 32263.7
29613.8     0.0 32263.7  2649.9 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
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    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Bottom Instream Flow
    RIVER LOCATION - FROM     : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow



Shortage                 Water Use
                                         Demand               From River By                     From Carrier By
Carried                 ============== ===============================
Structure   River                     ============== ==============================    From    =====================
Exchange  From  Total   Total    CU            To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
===================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   665.0     0.0     0.0     0.0     0.0   665.0
0.0     0.0   665.0     0.0 NA              -1.000
Baseflow    ISF.01       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1231.1     0.0     0.0     0.0     0.0  1231.1
0.0     0.0  1231.1     0.0 NA              -1.000
Baseflow    ISF.01       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1440.0     0.0     0.0     0.0     0.0  1440.0
0.0     0.0  1440.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
```

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Baseflow    ISF.01       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5225.0     0.0     0.0     0.0     0.0  5225.0
0.0     0.0  5225.0  1197.5 NA                -1.000
Baseflow    ISF.01       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5350.0     0.0     0.0     0.0     0.0  5350.0
0.0     0.0  5350.0  1452.4 NA                -1.000
Baseflow    ISF.01       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5
0.0     0.0  4027.5     0.0 NA                -1.000
Baseflow    ISF.01       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5
0.0     0.0  4027.5     0.0 NA                -1.000
Baseflow    ISF.01       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6
0.0     0.0  3897.6     0.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Baseflow    ISF.01       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 32263.7     0.0     0.0     0.0     0.0 32263.7
0.0     0.0 32263.7  2649.9 NA                -1.000

#
# _________________________________________________________________________________
# *.xre       Reservoir Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex5.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 10:58: 2
# Time Step:         Monthly
#
# _________________________________________________________________________________

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
PAGE NO.   1

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  0  100000.; where account 0 is the total
    RESERVOIR OWNER           : Total
    RIVER LOCATION            : Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.

                                                                                                                        From
Storage to                                                     Station Balance
                                              From River By             From Carrier By
========================                             Targt_0    BOM  =======================
                             Initial ================================ ======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln    Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1           0 1979  OCT 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   358.3     0.0
1000.0  1358.3     0.0     0.0 48641.7100000.0 50000.0  3000.0   358.3     0.0     0.0  3358.3
Res_1           0 1979  NOV 48641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48641.7100000.0 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1979  DEC 48641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48641.7100000.0 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  JAN 48641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48641.7100000.0 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  FEB 48641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48641.7100000.0 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  MAR 48641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    24.7     0.0 48617.0100000.0 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  APR 48617.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   320.9     0.0 48296.1100000.0 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  MAY 48296.1 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0
0.0     0.0   293.8     0.0 60002.3100000.0 51358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1           0 1980  JUN 60002.3 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0
0.0     0.0   794.7     0.0 71207.6100000.0 39358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1           0 1980  JUL 71207.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5     0.0
0.0  2302.5   477.0     0.0 68428.1100000.0 27358.3  3000.0  2302.5     0.0     0.0  5302.5
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Res_1          0 1980  AUG 68428.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2427.5     0.0
0.0  2427.5   371.5     0.0 65629.2100000.0 27358.3  3000.0  2427.5     0.0     0.0  5427.5
Res_1          0 1980  SEP 65629.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2297.6     0.0
0.0  2297.6   301.3     0.0 63030.3100000.0 27358.3  3000.0  2297.6     0.0     0.0  5297.6
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  TOT 50000.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0 24000.0  7385.9     0.0
1000.0  8385.9  2583.8     0.0 63030.3    -1.0    -1.0 60000.0  7385.9 24000.0     0.0 43385.9


   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
PAGE NO.   2

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  1   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_1
    RIVER LOCATION            : Exist. Reservoir

                                                                                                                        From
Storage to                                                                     Station Balance
                                              From River By             From Carrier By
========================                             Targt_0    BOM  =======================
                             Initial ================================= ======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1          1 1979  OCT 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   333.3     0.0
1000.0  1333.3     0.0     0.0 48641.7 50000.0 50000.0  3000.0   358.3     0.0     0.0  3358.3
Res_1          1 1979  NOV 48641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48641.7 51358.3 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1          1 1979  DEC 48641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48641.7 51358.3 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1          1 1980  JAN 48641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48641.7 51358.3 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1          1 1980  FEB 48641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 48641.7 51358.3 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1          1 1980  MAR 48641.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    24.7     0.0 48617.0 51358.3 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1          1 1980  APR 48617.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   320.9     0.0 48296.1 51383.0 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1          1 1980  MAY 48296.1   395.5     0.0     0.0     0.0     0.0     0.0     0.0   395.5     0.0     0.0
0.0     0.0   237.3     0.0 48454.3 51703.9 51358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1          1 1980  JUN 48454.3   463.7     0.0     0.0     0.0     0.0     0.0     0.0   463.7     0.0     0.0
0.0     0.0   539.9     0.0 48378.1 39997.7 39358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1          1 1980  JUL 48378.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   334.9     0.0 48043.2 28792.4 27358.3  3000.0  2302.5     0.0     0.0  5302.5
Res_1          1 1980  AUG 48043.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   270.4     0.0 47772.9 31571.9 27358.3  3000.0  2427.5     0.0     0.0  5427.5
Res_1          1 1980  SEP 47772.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   227.3     0.0 47545.6 34370.8 27358.3  3000.0  2297.6     0.0     0.0  5297.6
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          1 1980  TOT 49975.0   859.2     0.0     0.0     0.0     0.0     0.0     0.0   859.2   333.3     0.0
1000.0  1333.3  1955.3     0.0 47545.6    -1.0    -1.0 60000.0  7385.9 24000.0     0.0 43385.9

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex5.* data set
PAGE NO.   3

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  2   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_2
    RIVER LOCATION            : Exist. Reservoir

                                                                                                                        From
Storage to                                                                     Station Balance
                                              From River By             From Carrier By
========================                             Targt_0    BOM  =======================
                             Initial ================================= ======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1          2 1979  OCT    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    25.0     0.0
0.0    25.0     0.0     0.0     0.0 50000.0 50000.0  3000.0   358.3     0.0     0.0  3358.3
Res_1          2 1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 51358.3 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1          2 1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 51358.3 51358.3  3000.0     0.0     0.0     0.0  3000.0
```

```
Res_1           2 1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 51358.3 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 51358.3 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 51358.3 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 51383.0 51358.3  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  MAY     0.0 11604.5     0.0     0.0     0.0     0.0     0.0     0.0 11604.5     0.0     0.0
0.0     0.0    56.5     0.0 11548.0 51703.9 51358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1           2 1980  JUN 11548.0 11536.3     0.0     0.0     0.0     0.0     0.0     0.0 11536.3     0.0     0.0
0.0     0.0   254.8     0.0 22829.5 39997.7 39358.3 15000.0     0.0 12000.0     0.0  3000.0
Res_1           2 1980  JUL 22829.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5     0.0
0.0  2302.5   142.1     0.0 20384.9 28792.4 27358.3  3000.0  2302.5     0.0     0.0  5302.5
Res_1           2 1980  AUG 20384.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2427.5     0.0
0.0  2427.5   101.1     0.0 17856.3 31571.9 27358.3  3000.0  2427.5     0.0     0.0  5427.5
Res_1           2 1980  SEP 17856.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2297.6     0.0
0.0  2297.6    74.0     0.0 15484.7 34370.8 27358.3  3000.0  2297.6     0.0     0.0  5297.6
___________ ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  TOT    25.0 23140.8     0.0     0.0     0.0     0.0     0.0     0.0 23140.8  7052.6     0.0
0.0  7052.6   628.5     0.0 15484.7    -1.0    -1.0 60000.0  7385.9 24000.0     0.0 43385.9
#
# ________________________________________________________________________________
# *.xop       Operational Right Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex5.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 10:58: 2
# Time Step:         Monthly
#
# ________________________________________________________________________________

 Operational Right Summary  ACFT

 ID = Opr_1             Name = Opr_Res_1_to_Target      Opr Type =    9   Admin # =        10.00000
 Source 1 = Res_1       Destination = 0                 Year On =     0   Year Off =  9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
AVG      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0

 Operational Right Summary  ACFT

 ID = Opr_2             Name = Opr_Res_1_to_Dem_2       Opr Type =    2   Admin # =         9.00000
 Source 1 = Res_1       Destination = Dem_2             Year On =     0   Year Off =  9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980   333.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   333.3
AVG    333.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   333.3

 Operational Right Summary  ACFT

 ID = Opr_3             Name = Opr_Res_1_to_ISF         Opr Type =    1   Admin # =         9.00000
 Source 1 = Res_1       Destination = ISF               Year On =     0   Year Off =  9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5  2427.5  2297.6  7052.6
AVG     25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2302.5  2427.5  2297.6  7052.6

 Operational Right Summary  ACFT

 ID = Opr_4             Name = Opr_Res_1_to_Dem_3       Opr Type =    3   Admin # =         9.00000
 Source 1 = Res_1       Destination = Dem_3             Year On =     0   Year Off =  9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1000.0
AVG   1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1000.0
```

Example 6

```
# Exhibit 6.1
# *.rsp; response file for Statemod Example 6
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                        Name
# ______________________________________      _____________________________
Control                                     = ex6.ctl
River_Network                               = ..\ex2\ex2.rin
StreamGage_Station                          = ..\ex1\ex1.ris
Stream_Base_Monthly                         = ..\ex1\ex1.rim
StreamGage_Historic_Monthly                 = ex6.rih
Diversion_Station                           = ..\ex1\ex1.dds
Diversion_Right                             = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                    = ..\ex1\ex1.ddm
Diversion_Historic_Monthly                  = ex6.ddh
Reservoir_Station                           = ..\ex2\ex2.res
Reservoir_Right                             = ..\ex2\ex2.rer
Reservoir_Target_Monthly                    = ..\ex2\ex2.tam
Reservoir_Historic_Monthly                  = ex6.eom
Evaporation_Monthly                         = ..\ex2\ex2.eva
Instreamflow_Station                        = ..\ex1\ex1.ifs
Instreamflow_Right                          = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly          = ..\ex1\ex1.ifa
Operational_Right                           = ..\ex4\ex4.opr
DelayTable_Monthly                          = ..\ex1\ex1.urm
OutputRequest                               = ..\ex2\ex2.out
```

```
# Exhibit 6.2
# ex*.ctl;  Control file for StateMod Example 6
#
#
  STATEMOD
  StateMod Baseflow Example - ex6.* data set
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;    ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;      ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       1     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       6     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       1     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       0     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       0     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       1     : isig    Number of significant digits behind decimal point in output files
```

```
# Exhibit 6.3
# *.rih;  Historic monthly streamflow file for StateMod Example 6
```

```
#
# ****************************************************************
#
#     Card 1   Control
#     format:  (i4, 1x, a12, 12f8.0)
#
#     Year     iryr:            Year
#     ID       cistat:          Station id
#     runoff(1-12):             Streamflow by month = virinp(im,np) for station np
#
#
#
# Yr ID               Oct     Nov     Dec     Jan     Feb     Mar     Apr     May     Jun     Jul     Aug     Sep
Total
# -e-b----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb----
----e
#
   10/1979  -      9/1981 AF/M  WYR
1980 Dem_3          1000.   1000.   1000.   1000.   1000.   1000.   1000.   5000.   5000.   1000.   1000.   1000.
20000.
1980 Dem_5          3000.   3000.   3000.   3000.   3000.   3000.   3000.  15000.  15000.   3000.   3000.   3000.
60000.
1980 ISF.01         4000.   4000.   4000.   4000.   4000.   4000.   4000.  20000.  20000.   4000.   4000.   4000.
80000.
1981 Dem_3          1000.   1000.   1000.   1000.   1000.   1000.   1000.   5000.   5000.   1000.   1000.   1000.
20000.
1981 Dem_5          3000.   3000.   3000.   3000.   3000.   3000.   3000.  15000.  15000.   3000.   3000.   3000.
60000.
1981 ISF.01         4000.   4000.   4000.   4000.   4000.   4000.   4000.  20000.  20000.   4000.   4000.   4000.
80000.

# Exhibit 6.4
# *.ddh;  Direct Flow Historical Diversions for StateMod Example 6
#
# ******************************************************
#
#     Card 1   Control
#     format:  (i4, 1x, a12, 12f8.0
#
#     Year     idyr:            Year
#     ID       cistat:          Station id
#     diverm(1-12):             Gaged Diversions for month 1-12
#
#
# Yr ID               Oct     Nov     Dec     Jan     Feb     Mar     Apr     May     Jun     Jul     Aug     Sep
Total
# -e-b----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb----
----e
#
   10/1979  -      9/1980 AF/M  WYR
1980 Dem_3             0.    556.    852.    951.    984.    995.    998.   1000.   1000.   1000.   1000.   1000.
10336.
1980 Dem_4             0.      0.      0.      0.      0.    200.    345.    456.    500.    500.    240.      0.
2241.
1980 Dem_5             0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.
1980 Dem_2          2458.   2259.   2290.   2758.   2880.   3000.   3000.   3000.   3000.   3000.   3000.   1500.
32145.
1980 Dem_1          2000.   2000.   2000.   2000.   2000.   2000.   2000.   2000.   2000.   2000.   2000.   2000.
24000.

# Exhibit 6.5
# *.eom; End of month contents for StateMod Example
#
# ******************************************************
#
#     Card 1   Control
#     format:  (i4, 1x, a12, 12f8.0)
#
#     Year     iryr:            Year
#     ID       cistat:          Station id
#     resolv(1-12):             end of Month reservoir contents
#
#
# Yr ID               Oct     Nov     Dec     Jan     Feb     Mar     Apr     May     Jun     Jul     Aug     Sep
Total
# -e-b----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb----
----e
   10/1979  -      9/1980 ACFT  WYR
1980 Res_1         46039.  43261.  40674.  38246.  36209.  33772.  31358.  43248.  54924.  52296.  49714.  47292.

#
# ________________________________________________________________________________
# *.xbi       Base flow information at stream gauge locations
#
#   STATEMOD
#   StateMod Baseflow Example - ex6.* data set
#
# Statemod Version:   12.289 Date = 2008/09/12)
```

```
# Run date:           9/15/ 8 11:49: 9
# Time Step:         Monthly
#
# _____________________________________________________________________________________


 Naturalized Flow Estimate Information From  1979 OCT  To  1980 SEP
 Note: Annual Average Naturalized Flows have negatives set to zero
       Divert includes diversion from stream by all sources (priority, storage, exchange)
       Return includes returns from diversions & wells
       Wel Dep includes immediate and lagged depletions
       Note: Ground Water storage to maintain streamflow at or greater than zero (To_From_GW_Stor) is not included


Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1979 OCT    31 Dem_3           1000.        0.        0.        0.        0.        0.        0.     1000.     1000.
|        0.        0.        0.        0.        0. Exist. Diver. 3/Inflow
1979 OCT    31 Dem_5           3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
1979 OCT    31 ISF.01          4000.        0.     4458.     1254.        0.    -3961.        0.     3243.     3243.
|        0.        0.     1629.        0.        0. Bottom Instream Flow

Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1979 NOV    30 Dem_3           1000.        0.      556.        0.        0.        0.        0.     1556.     1556.
|        0.        0.      278.        0.        0. Exist. Diver. 3/Inflow
1979 NOV    30 Dem_5           3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
1979 NOV    30 ISF.01          4000.        0.     4815.     2438.        0.    -2778.        0.     3599.     3599.
|        0.        0.     1808.        0.        0. Bottom Instream Flow

Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1979 DEC    31 Dem_3           1000.        0.      852.        0.        0.        0.        0.     1852.     1852.
|        0.        0.      426.        0.        0. Exist. Diver. 3/Inflow
1979 DEC    31 Dem_5           3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
1979 DEC    31 ISF.01          4000.        0.     5142.     2929.        0.    -2587.        0.     3626.     3626.
|        0.        0.     1971.        0.        0. Bottom Instream Flow

Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1980 JAN    31 Dem_3           1000.        0.      951.        0.        0.        0.        0.     1951.     1951.
|        0.        0.      476.        0.        0. Exist. Diver. 3/Inflow
1980 JAN    31 Dem_5           3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
1980 JAN    31 ISF.01          4000.        0.     5709.     3313.        0.    -2428.        0.     3968.     3968.
|        0.        0.     2254.        0.        0. Bottom Instream Flow

Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1980 FEB    28 Dem_3           1000.        0.      984.        0.        0.        0.        0.     1984.     1984.
|        0.        0.      492.        0.        0. Exist. Diver. 3/Inflow
1980 FEB    28 Dem_5           3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
1980 FEB    28 ISF.01          4000.        0.     5864.     3493.        0.    -2037.        0.     4334.     4334.
|        0.        0.     2332.        0.        0. Bottom Instream Flow
```

```
Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                 ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1980 MAR    31 Dem_3           1000.        0.      995.        0.        0.        0.        0.     1995.     1995.
|        0.        0.      498.        0.        0. Exist. Diver. 3/Inflow
1980 MAR    31 Dem_5           3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
1980 MAR    31 ISF.01          4000.        0.     6195.     3615.        0.    -2437.       19.     4162.     4162.
|        0.        0.     2516.        0.        0. Bottom Instream Flow

Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                 ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1980 APR    30 Dem_3           1000.        0.      998.        0.        0.        0.        0.     1998.     1998.
|        0.        0.      499.        0.        0. Exist. Diver. 3/Inflow
1980 APR    30 Dem_5           3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
1980 APR    30 ISF.01          4000.        0.     6343.     3734.        0.    -2414.      232.     4427.     4427.
|        0.        0.     2804.        0.        0. Bottom Instream Flow

Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                 ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1980 MAY    31 Dem_3           5000.        0.     1000.        0.        0.        0.        0.     6000.     6000.
|        0.        0.      500.        0.        0. Exist. Diver. 3/Inflow
1980 MAY    31 Dem_5          15000.        0.        0.        0.        0.        0.        0.    15000.    15000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
1980 MAY    31 ISF.01         20000.        0.     6456.     3800.        0.    11890.      219.    34765.    34765.
|        0.        0.     2847.        0.        0. Bottom Instream Flow

Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                 ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1980 JUN    30 Dem_3           5000.        0.     1000.        0.        0.        0.        0.     6000.     6000.
|        0.        0.      500.        0.        0. Exist. Diver. 3/Inflow
1980 JUN    30 Dem_5          15000.        0.        0.        0.        0.        0.        0.    15000.    15000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
1980 JUN    30 ISF.01         20000.        0.     6500.     3839.        0.    11676.      642.    34979.    34979.
|        0.        0.     3292.        0.        0. Bottom Instream Flow

Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                 ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1980 JUL    31 Dem_3           1000.        0.     1000.        0.        0.        0.        0.     2000.     2000.
|        0.        0.      500.        0.        0. Exist. Diver. 3/Inflow
1980 JUL    31 Dem_5           3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
1980 JUL    31 ISF.01          4000.        0.     6500.     3850.        0.    -2628.      398.     4420.     4420.
|        0.        0.     3048.        0.        0. Bottom Instream Flow

Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                 ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1980 AUG    31 Dem_3           1000.        0.     1000.        0.        0.        0.        0.     2000.     2000.
|        0.        0.      500.        0.        0. Exist. Diver. 3/Inflow
1980 AUG    31 Dem_5           3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
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1980 AUG    31 ISF.01           4000.        0.     6240.     3785.        0.    -2582.      307.     4180.     4180.
|        0.        0.     2827.        0.        0. Bottom Instream Flow

Naturalized Flow Information ACFT
                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
Year  Mon Days River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|   ToSoilM   FrSoilM        CU      Loss   Pumping River Name
                                 ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
1980 SEP    30 Dem_3            1000.        0.     1000.        0.        0.        0.        0.     2000.     2000.
|        0.        0.      500.        0.        0. Exist. Diver. 3/Inflow
1980 SEP    30 Dem_5            3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
1980 SEP    30 ISF.01           4000.        0.     4500.     3285.        0.    -2422.      246.     3039.     3039.
|        0.        0.     1896.        0.        0. Bottom Instream Flow


 Base Flow Estimate Information  ACFT From  1980 OCT  To  1980 SEP
 Note: Annual Average Base Flows have negatives set to zero
       Divert includes diversion from stream by all sources (priority, storage, exchange)
       Return includes returns from diversions & wells
       Wel Dep includes immediate and lagged depletions
       CU does include net reservoir evaporation
       Note: Ground Water storage to maintain streamflow at or greater than zero (To_From_GW_Stor) is not included

                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
|        To      From
Year  Mon  Day River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|     SoilM     SoilM        CU      Loss   Pumping River Name
                                 ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
 Ave OCT       Dem_3            1000.        0.        0.        0.        0.        0.        0.     1000.     1000.
|        0.        0.        0.        0.        0. Exist. Diver. 3/Inflow
 Ave NOV       Dem_3            1000.        0.      556.        0.        0.        0.        0.     1556.     1556.
|        0.        0.      278.        0.        0. Exist. Diver. 3/Inflow
 Ave DEC       Dem_3            1000.        0.      852.        0.        0.        0.        0.     1852.     1852.
|        0.        0.      426.        0.        0. Exist. Diver. 3/Inflow
 Ave JAN       Dem_3            1000.        0.      951.        0.        0.        0.        0.     1951.     1951.
|        0.        0.      476.        0.        0. Exist. Diver. 3/Inflow
 Ave FEB       Dem_3            1000.        0.      984.        0.        0.        0.        0.     1984.     1984.
|        0.        0.      492.        0.        0. Exist. Diver. 3/Inflow
 Ave MAR       Dem_3            1000.        0.      995.        0.        0.        0.        0.     1995.     1995.
|        0.        0.      498.        0.        0. Exist. Diver. 3/Inflow
 Ave APR       Dem_3            1000.        0.      998.        0.        0.        0.        0.     1998.     1998.
|        0.        0.      499.        0.        0. Exist. Diver. 3/Inflow
 Ave MAY       Dem_3            5000.        0.     1000.        0.        0.        0.        0.     6000.     6000.
|        0.        0.      500.        0.        0. Exist. Diver. 3/Inflow
 Ave JUN       Dem_3            5000.        0.     1000.        0.        0.        0.        0.     6000.     6000.
|        0.        0.      500.        0.        0. Exist. Diver. 3/Inflow
 Ave JUL       Dem_3            1000.        0.     1000.        0.        0.        0.        0.     2000.     2000.
|        0.        0.      500.        0.        0. Exist. Diver. 3/Inflow
 Ave AUG       Dem_3            1000.        0.     1000.        0.        0.        0.        0.     2000.     2000.
|        0.        0.      500.        0.        0. Exist. Diver. 3/Inflow
 Ave SEP       Dem_3            1000.        0.     1000.        0.        0.        0.        0.     2000.     2000.
|        0.        0.      500.        0.        0. Exist. Diver. 3/Inflow

____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ ________________________
 Ave Ann       Dem_3           20000.        0.    10336.        0.        0.        0.        0.    30336.    30336.
|        0.        0.     5168.        0.        0. Exist. Diver. 3/Inflow


 Base Flow Estimate Information  ACFT From  1980 OCT  To  1980 SEP
 Note: Annual Average Base Flows have negatives set to zero
       Divert includes diversion from stream by all sources (priority, storage, exchange)
       Return includes returns from diversions & wells
       Wel Dep includes immediate and lagged depletions
       CU does include net reservoir evaporation
       Note: Ground Water storage to maintain streamflow at or greater than zero (To_From_GW_Stor) is not included

                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
|        To      From
Year  Mon  Day River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|     SoilM     SoilM        CU      Loss   Pumping River Name
                                 ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
 Ave OCT       Dem_5            3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
 Ave NOV       Dem_5            3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
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 Ave DEC       Dem_5            3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
 Ave JAN       Dem_5            3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
 Ave FEB       Dem_5            3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
 Ave MAR       Dem_5            3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
 Ave APR       Dem_5            3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
 Ave MAY       Dem_5           15000.        0.        0.        0.        0.        0.        0.    15000.    15000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
 Ave JUN       Dem_5           15000.        0.        0.        0.        0.        0.        0.    15000.    15000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
 Ave JUL       Dem_5            3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
 Ave AUG       Dem_5            3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow
 Ave SEP       Dem_5            3000.        0.        0.        0.        0.        0.        0.     3000.     3000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow

____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ ________________________
 Ave Ann       Dem_5           60000.        0.        0.        0.        0.        0.        0.    60000.    60000.
|        0.        0.        0.        0.        0. Exist. Diver. 5/Inflow


 Base Flow Estimate Information  ACFT From  1980 OCT  To  1980 SEP
 Note: Annual Average Base Flows have negatives set to zero
       Divert includes diversion from stream by all sources (priority, storage, exchange)
       Return includes returns from diversions & wells
       Wel Dep includes immediate and lagged depletions
       CU does include net reservoir evaporation
       Note: Ground Water storage to maintain streamflow at or greater than zero (To_From_GW_Stor) is not included

                               Gauged    Import    Divert    Return      Well     Delta       Net     Total   w/o (-)
|        To      From
Year  Mon  Day River ID          Flow       (-)       (+)       (-)   Dep (+)   Sto (+)   Evp (+) Base Flow Base Flow
|     SoilM     SoilM        CU      Loss   Pumping River Name
                                 ( 1)      ( 2)      ( 3)      ( 4)      ( 5)      ( 6)      ( 7)      ( 8)      ( 9)
|      (10)      (11)      (12)      (13)      (14) (15)
____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ _________ ________________________
 Ave OCT       ISF.01           4000.        0.     4458.     1254.        0.    -3961.        0.     3243.     3243.
|        0.        0.     1629.        0.        0. Bottom Instream Flow
 Ave NOV       ISF.01           4000.        0.     4815.     2438.        0.    -2778.        0.     3599.     3599.
|        0.        0.     1808.        0.        0. Bottom Instream Flow
 Ave DEC       ISF.01           4000.        0.     5142.     2929.        0.    -2587.        0.     3626.     3626.
|        0.        0.     1971.        0.        0. Bottom Instream Flow
 Ave JAN       ISF.01           4000.        0.     5709.     3313.        0.    -2428.        0.     3968.     3968.
|        0.        0.     2254.        0.        0. Bottom Instream Flow
 Ave FEB       ISF.01           4000.        0.     5864.     3493.        0.    -2037.        0.     4334.     4334.
|        0.        0.     2332.        0.        0. Bottom Instream Flow
 Ave MAR       ISF.01           4000.        0.     6195.     3615.        0.    -2437.       19.     4162.     4162.
|        0.        0.     2516.        0.        0. Bottom Instream Flow
 Ave APR       ISF.01           4000.        0.     6343.     3734.        0.    -2414.      232.     4427.     4427.
|        0.        0.     2804.        0.        0. Bottom Instream Flow
 Ave MAY       ISF.01          20000.        0.     6456.     3800.        0.    11890.      219.    34765.    34765.
|        0.        0.     2847.        0.        0. Bottom Instream Flow
 Ave JUN       ISF.01          20000.        0.     6500.     3839.        0.    11676.      642.    34979.    34979.
|        0.        0.     3292.        0.        0. Bottom Instream Flow
 Ave JUL       ISF.01           4000.        0.     6500.     3850.        0.    -2628.      398.     4420.     4420.
|        0.        0.     3048.        0.        0. Bottom Instream Flow
 Ave AUG       ISF.01           4000.        0.     6240.     3785.        0.    -2582.      307.     4180.     4180.
|        0.        0.     2827.        0.        0. Bottom Instream Flow
 Ave SEP       ISF.01           4000.        0.     4500.     3285.        0.    -2422.      246.     3039.     3039.
|        0.        0.     1896.        0.        0. Bottom Instream Flow

____ ____ ____ ____________ _________ _________ _________ _________ _________ _________ _________ _________ _________
| _________ _________ _________ _________ ________________________
 Ave Ann       ISF.01          80000.        0.    68722.    39336.        0.    -2708.     2064.   108742.   108742.
|        0.        0.    29225.        0.        0. Bottom Instream Flow

#
# ______________________________________________________________________________
#
# *.xbm       Base Flow Results - Monthly
#
#   STATEMOD
#   StateMod Baseflow Example - ex6.* data set
#
# Statemod Version:    12.289 (2008/09/12)
# Run date and time:     9/15/ 8 11:49: 9
# Time Step:         Monthly
#
# ______________________________________________________________________________
# Yr Station ID      OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP
TOTAL
```

```
#___ ____________ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______
   10/1979  -      9/1980 ACFT  WYR
1980 Dem_3          1000.   1556.   1852.   1951.   1984.   1995.   1998.   6000.   6000.   2000.   2000.   2000.
30336.
1980 Dem_5          3000.   3000.   3000.   3000.   3000.   3000.   3000.  15000.  15000.   3000.   3000.   3000.
60000.
1980 ISF.01         3243.   3599.   3626.   3968.   4334.   4162.   4427.  34765.  34979.   4420.   4180.   3039.
108742.
```

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cdssnews@state.co.us
Last updated: September 2008

Example 7

```
# Exhibit 7.1
# *.rsp; response file for Statemod Example 7
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                      Name
# _______________________________________  _____________________________
Control                                   = ex7.ctl
River_Network                             = ex7.rin
StreamGage_Station                        = ..\ex1\ex1.ris
Stream_Base_Monthly                       = ..\ex1\ex1.rim
Diversion_Station                         = ..\ex1\ex1.dds
Diversion_Right                           = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                  = ..\ex1\ex1.ddm
Instreamflow_Station                      = ..\ex1\ex1.ifs
Instreamflow_Right                        = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly        = ..\ex1\ex1.ifa
Well_Station                              = ex7.wes
Well_Right                                = ex7.wer
Well_Demand_Monthly                       = ex7.wem
Well_Historic_Monthly                     = ex7.weh
DelayTable_Monthly                        = ex7.urm
OutputRequest                             = ..\ex1\ex1.out
```

```
# Exhibit 7.2
# ex*.ctl;  Control file for StateMod Example 7
#
#
  STATEMOD
  StateMod Operating Rule Example - ex7.* data set
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;    ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;      ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       3     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       0     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       0     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       0     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       1     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       0     : isig    Number of significant digits behind decimal point in output files
```

```
# Exhibit 7.3
# *.rin; River node network file for StateMod Example 7
#
# *******************************************************
#
#
#  Card 1   Control
```

```
#  format:  (a12, a24, a12, 1x, a12, 1x, f8.0)
#
#  ID           cstaid:  Station ID
#  Name         stanam:  Station name
#  Downstream   cstadn:  Downstream node ID
#  Comment     comment:  Alternate identifier/comment.
#  GWMax        gwmaxr:  Max recharge limit (cfs) - see iwell in control file.
#
#   ID                Name          DownStream     Comment    GWMax
#---------eb----------------------eb----------exb----------exb------e
Dem_3       Exist. Diver. 3/Inflow  Dem_4
Wel_3       Exist. Well_3           Dem_3
Dem_4       Exist. Diver. 4         Riv_50
Dem_5       Exist. Diver. 5/Inflow  Dem_2
Dem_2       Exist. Diver. 2         Riv_50
Wel_2       Exist. Well_2           Dem_2
Riv_50      Confluence              Dem_1
Dem_1       Exist. Diver. 1         ISF
Wel_1       Exist. Well_1           Dem_1
ISF         Top Instream Flow       ISF.01
ISF.01      Bottom Instream Flow

# Exhibit 7.4
# *.wes; Well structure file for StateMod Example 7
#
#     Card 1   Control
#     format:  (a12, a24, a12,i8, f8.0, 1x, a12)
#
#     ID       cwelid:   Well ID
#     Name     divnamw:  Well name
#     Riv ID   cgoto:    (idvstaw ) River Node where well is located
#     On/Off   idivsww:  Switch 0=off; 1=on
#     Capacty  divcapw:  Well capacity (cfs)
#     Daily ID cdividwx; Well ID to use for daily data
#
# ID        Name                    Riv ID        ON/Off Capacty Daily ID
#----------eb----------------------eb----------eb------eb------exb----------e
#     Card 2   User Data
#     format:  (12x, 24x, a12, 2i8, 2f8.0)
#
#     DivID   cgoto2 (divcow2) Diversion this well is tied to (N/A if not tied to a diversion)
#     DemCode idvcomw:  Code 1=input demand evrey year, 2=constant monthly, 3=jansen hayes,
#                       4=blaney criddle, 5=zero, 6=tied to a direct diversion
#     #-Ret   nrtnw:    Number of return flow locations
#     #-Dep   nrtnw2:   Number of depletion locations
#     Eff %   diveffw:  System efficiency (%)
#     Area    areaw:    Not used; enter 0
#     Type    irturnw:  Use type; 0-3=Inbasin; 4=Transmountain
#     Source  demsrcw:  Irrig acreage source (1=GIS, 2=tia, 3=GIS-primary, 4=tia-primary,
#                       5=secondary, 6=M&I no acreage, 7=carrier no acreage, 8=user),
#
# NA        N/A                     DivID        DemCode   #-Ret   #-Dep   Eff %    Area    Type  Source
#----------eb----------------------eb----------eb------eb------eb------eb------eb------eb------eb------e
#     Card 3   Variable Efficiency Data (Enter if diveff < 0)
#     format:  (free)
#
#     Eff %    Diveff Efficiency for month 1-12 where 1 is tied to year type
# eff(1)  eff(2)  eff(3)  eff(4)  eff(5)  eff(6)  eff(7)  eff(8)  eff(9) eff(10) eff(11) eff(12)
#------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------e
#
#     Card 4   Return Flow Data (Enter nrtnw values)
#     format:  (36x, a12, f8.0, i8)
#
#     Ret Id   crtnidw:  River ID receiving return flow
#     Ret %    pcttotw:  Percent of return flow to location
#     Table #  irtndlw:  Return flow table id
#
# NA                                NA            Ret ID   Ret % Table #
#----------------------------------eb----------eb------eb------eb------e
#
#     Card 5   Depletion Data (Enter nrtnw2 values)
#     format:  (36x, a12, f8.0, i8)
#
#     Dep Id   crtnidw2: River ID depleted by diversion
#     Dep %    pcttotw2: Percent of depletion to location
#     Table #  irtndlw2: Return (depletion) table id
#
#1 ID       Name                    Riv ID        ON/Off Capacty Daily ID     Primary      Plan ID
#----------eb----------------------eb----------eb------eb------exb----------exb----------exb---------e
#
#2NA        N/A                     DivID        DemCode   #-Ret   #-Dep   Eff %    Area    Type  Source
#----------eb----------------------eb----------eb------eb------eb------eb------eb------eb------eb------e
#
#4 NA                               Ret ID         Ret % Table #
#----------------------------------eb----------eb------eb------eb------e
#
#5 NA                               Dep ID         Dep % Table #
#----------------------------------eb----------eb------eb------eb------e
Wel_1       Well Structure 1        Wel_1              1   5000. Wel_1        0            NA
```

```
                                    NA                 1       1       1     50.      0.       1       8
                                    ISF            50.00       1 Rtn01
                                    ISF           100.00       3 Dep03
Wel_2       Well Structure 2        Wel_2              1   5000. Wel_2        0            NA
                                    NA                 1       1       1     50.      0.       1       8
                                    Dem_1         100.00       1 Rtn01
                                    Dem_1         100.00       3 Dep03
Wel_3       Well_3 to Dem_3         Dem_3              1   5000. Wel_3        0            NA
                                    Dem_3              6       1       1     50.      0.       1       8
                                    Dem_4         100.00       1 Rtn01
                                    Dem_3          50.00       3 Dep03

# Exhibit 7.5
# *.wer;  Well right file for StateMod Example 7
#
# *******************************************************
#
#     Card 1   Control
#     format:  (a12, a24, a12, 4x, f12.5, f8.0, i8)
#
#     ID       crigidw:         Well right ID
#     Name     namew:           Well right name
#     Struct   cgoto:           Well Structure ID associated with this right
#     Admin #  rtem:            Priority or Administration number (if used)
#     Right    dcrwel(k):       Well right (cfs)
#     On/Off   iwelrsw(k):      Switch 0 = off, 1 = on
#
# ID        Name                    Struct          Admin#         Right  On/Off
#----------eb----------------------eb----------e----b----------eb------eb------e
Wel_1 Wr#1  Wel_1 to Wel_1          Wel_1              20.00000   10.00       1
Wel_2 Wr#1  Wel_2 to Wel_2          Wel_2              20.00000    5.00       1
Wel_3 Wr#1  Wel_3 to Dem_3          Wel_3              20.00000   50.00       1
Wel_3 Wr#2  Wel_4 to Dem_3          Wel_3              20.00000    5.00       1

# Exhibit 7.6
# *.wem;  Well structure demand file for StateMod Example 7
#
# *******************************************************
#
#     Card 1   Control
#     format:  (i4, 1x, a12, 12f8.0
#
#     Year     idyr:            Year
#     ID       cistat:          Station id
#     diverm(1-12):             Demand for month 1-12 ( ) = diver(im,nu) for station nu
#
#
# Yr ID               Oct     Nov     Dec     Jan     Feb     Mar     Apr     May     Jun     Jul     Aug     Sep
Total
# -e-b----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb----
----e
#
   10/1979  -      9/1980 AF/M  WYR
1980 Wel_1          3000.   3000.   3000.   3000.   3000.   3000.   3000.   3000.   3000.   3000.   3000.   3000.
36000.
1980 Wel_2          1000.   1000.   1000.   1000.   1000.   1000.   1000.   1000.   1000.   1000.   1000.   1000.
12000.

# Exhibit 7.7
# *.wes;  Historic Well Pumping file for StateMod Example 7
#
# *******************************************************
#
#     Card 1   Control
#     format:  (i4, 1x, a12, 12f8.0
#
#     Year     idyr:            Year
#     ID       cistat:          Station id
#     diverm(1-12):             Demand for month 1-12 ( ) = diver(im,nu) for station nu
#
#
# Yr ID               Oct     Nov     Dec     Jan     Feb     Mar     Apr     May     Jun     Jul     Aug     Sep
Total
# -e-b----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb----
----e
#
   10/1979  -      9/1980 AF/M  WYR
1980 Wel_1           615.    595.    615.    615.    555.    615.    595.    615.    595.    615.    615.    595.
7240.
1980 Wel_2           307.    298.    307.    307.    278.    307.    298.    307.    298.    307.    307.    298.
3620.
1980 Wel_3          1000.    350.    454.    755.    766.    835.    885.      0.      0.    475.    558.    678.
6757.

# Exhibit 7.8
# *.urm; Return flow delay table for StateMod Example 7
#
# *******************************************************
#
```

```
#     Card 1   Control
#     format:  (16x, i8, 12f8.0)
#
#     ID       idly:            Delay table id
#     Ret      dlyrat(1-n,idl): Return for month n, station idl    Ret1-12 coincides with months in year type in .ctl
file
#
# ID           Ret 1   Ret 2   Ret 3   Ret 4   Ret 5   Ret 6   Ret 7   Ret 8   Ret 9  Ret 10  Ret 11  Ret 12
#----------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------eb------e
#
       1 5     50.     50.      0.      0.      0.    Irrigation Return Table
       2 5     40.     30.     20.     10.      0.    M&I Return Table
       3 5     25.     25.     25.     25.      0.    Well Depletion Table
#
#
# ________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex5.* data set
#
# Statemod Version: 12.29.05 Date = 2008/10/23)
# Run date:          11/ 6/ 8 15:46:13
# Time Step:         Monthly
#
# ________________________________________________________________________________

                              Water Budget  ACFT

                Stream                 From/To        From        From       Total             From River        Well
Reservoir   Reservoir      Stream    Reservoir         To        SoilM       Total
 Year   Mo      Inflow      Return   GWStorage       SoilM    Plan (5)      Inflow  Divert (6)     by Well   Depletion
Evaporation     Seepage     Outflow      Change       SoilM      Change     Outflow       Delta      CU (1)     Loss
(2) Pumping (3) Salvage (4)
                   (+)         (+)         (+)         (+)         (+)          NA         (-)         (-)         (-)
(-)         (-)         (-)         (-)         (-)         (-)         NA          NA          NA          NA
NA          NA
                  ( 1)        ( 2)        ( 3)        ( 4)        ( 5)        ( 6)        ( 7)        ( 8)        ( 9)
(10)        (11)        (12)        (13)        (14)        (15)        (16)        (17)        (18)        (19)
(20)        (21)
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________

 1979 OCT      4000.0      1751.1         0.0         0.0         0.0      5751.1      6444.4         0.0         0.0
0.0         0.0       665.0     -1358.3         0.0         0.0      5751.1         0.0      2622.2         0.0
0.0         0.0
 1979 NOV      4000.0      3231.1         0.0         0.0         0.0      7231.1      6000.0         0.0         0.0
0.0         0.0      1231.1         0.0         0.0         0.0      7231.1         0.0      2400.0         0.0
0.0         0.0
 1979 DEC      4000.0      3440.0         0.0         0.0         0.0      7440.0      6000.0         0.0         0.0
0.0         0.0      1440.0         0.0         0.0         0.0      7440.0         0.0      2400.0         0.0
0.0         0.0
 1980 JAN      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
 1980 FEB      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
 1980 MAR      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
24.7         0.0      1600.0       -24.7         0.0         0.0      7600.0         0.0      2424.7         0.0
0.0         0.0
 1980 APR      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
320.9         0.0      1600.0      -320.9         0.0         0.0      7600.0         0.0      2720.9         0.0
0.0         0.0
 1980 MAY     20000.0      3725.0         0.0         0.0         0.0     23725.0      6500.0         0.0         0.0
293.8         0.0      5225.0     11706.2         0.0         0.0     23725.0         0.0      2943.8         0.0
0.0         0.0
 1980 JUN     20000.0      3850.0         0.0         0.0         0.0     23850.0      6500.0         0.0         0.0
794.7         0.0      5350.0     11205.3         0.0         0.0     23850.0         0.0      3444.7         0.0
0.0         0.0
 1980 JUL      4000.0      3725.0         0.0         0.0         0.0      7725.0      6000.0         0.0         0.0
477.0         0.0      4027.5     -2779.5         0.0         0.0      7725.0         0.0      2877.0         0.0
0.0         0.0
 1980 AUG      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
371.5         0.0      4027.5     -2799.0         0.0         0.0      7600.0         0.0      2771.5         0.0
0.0         0.0
 1980 SEP      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
301.3         0.0      3897.6     -2598.9         0.0         0.0      7600.0         0.0      2701.3         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
 1980 Tot     80000.0     41322.2         0.0         0.0         0.0    121322.2     73444.4         0.0         0.0
2583.8         0.0     32263.7     13030.3         0.0         0.0    121322.2         0.0     32106.0         0.0
0.0         0.0

                              Water Budget  ACFT
```

```
                 Stream                     From/To        From        From       Total              From River        Well
Reservoir   Reservoir      Stream   Reservoir          To        SoilM       Total
 Year   Mo      Inflow       Return   GWStorage       SoilM    Plan (5)      Inflow  Divert (6)     by Well   Depletion
Evaporation     Seepage     Outflow      Change        SoilM      Change      Outflow       Delta      CU (1)     Loss
(2) Pumping (3) Salvage (4)
                    (+)         (+)         (+)         (+)         (+)          NA         (-)         (-)         (-)
(-)         (-)         (-)         (-)         (-)         (-)         NA          NA          NA          NA
NA          NA
                   ( 1)        ( 2)        ( 3)        ( 4)        ( 5)        ( 6)        ( 7)        ( 8)        ( 9)
(10)        (11)        (12)        (13)        (14)        (15)        (16)        (17)        (18)        (19)
(20)        (21)
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
Ave   OCT      4000.0      1751.1         0.0         0.0         0.0      5751.1      6444.4         0.0         0.0
0.0         0.0       665.0     -1358.3         0.0         0.0      5751.1         0.0      2622.2         0.0
0.0         0.0
Ave   NOV      4000.0      3231.1         0.0         0.0         0.0      7231.1      6000.0         0.0         0.0
0.0         0.0      1231.1         0.0         0.0         0.0      7231.1         0.0      2400.0         0.0
0.0         0.0
Ave   DEC      4000.0      3440.0         0.0         0.0         0.0      7440.0      6000.0         0.0         0.0
0.0         0.0      1440.0         0.0         0.0         0.0      7440.0         0.0      2400.0         0.0
0.0         0.0
Ave   JAN      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
Ave   FEB      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
Ave   MAR      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
24.7         0.0      1600.0       -24.7         0.0         0.0      7600.0         0.0      2424.7         0.0
0.0         0.0
Ave   APR      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
320.9         0.0      1600.0      -320.9         0.0         0.0      7600.0         0.0      2720.9         0.0
0.0         0.0
Ave   MAY     20000.0      3725.0         0.0         0.0         0.0     23725.0      6500.0         0.0         0.0
293.8         0.0      5225.0     11706.2         0.0         0.0     23725.0         0.0      2943.8         0.0
0.0         0.0
Ave   JUN     20000.0      3850.0         0.0         0.0         0.0     23850.0      6500.0         0.0         0.0
794.7         0.0      5350.0     11205.3         0.0         0.0     23850.0         0.0      3444.7         0.0
0.0         0.0
Ave   JUL      4000.0      3725.0         0.0         0.0         0.0      7725.0      6000.0         0.0         0.0
477.0         0.0      4027.5     -2779.5         0.0         0.0      7725.0         0.0      2877.0         0.0
0.0         0.0
Ave   AUG      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
371.5         0.0      4027.5     -2799.0         0.0         0.0      7600.0         0.0      2771.5         0.0
0.0         0.0
Ave   SEP      4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
301.3         0.0      3897.6     -2598.9         0.0         0.0      7600.0         0.0      2701.3         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
Ave   Tot     80000.0     41322.2         0.0         0.0         0.0    121322.2     73444.4         0.0         0.0
2583.8         0.0     32263.7     13030.3         0.0         0.0    121322.2         0.0     32106.0         0.0
0.0         0.0
                                                                                        0.0 (6)
                                                                                ___________
                                                                                    73444.4

  Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency
             + max (Resevoir Evaporation (Evap), 0.0).
        (2) Loss is not part of the Stream Water Balance.
            It is the portion of a diversion, well pumping
            and reservoir seepage that does not return to
            the stream
        (3) Pumping is not part of the Stream Balance.
            Its impact on the stream is included in the From River by Well and Well Depletion columns
        (4) Salvage is not part of the Stream Water Balance.
            It is the portion of well pumping that does not impact the stream
        (5) From Plan is water from a reuse plan.
        (6) Divert does not include diversions by an
            instream flow or a T&C plan. Also to avoid
            double accounting with reservoir storage it has
            reduced by:
              1       0. af/yr for Diverted to Storage.
              2       0. af/yr for a Diversion Carrier.
              3       0. af/yr for a Reservior Carrier.
              4       0. af/yr for a Plan Carrier.
                      0. af/yr Total
#
# ________________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex7.* data set
#
# Statemod Version: 12.29.05 Date = 2008/10/23)
# Run date:          11/ 7/ 8  6:29:30
```

```
# Time Step:         Monthly #
# ________________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =        10
#
#
________________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
            operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID                Type         Admin #  On/Off  Str ID #1    Str ID #2           Amount Right Name
Str Name #1                Str Name #2
#    (1) (2)                (3)             (4)     (5)  (6)          (7)                   (8) (9)
(10)                        (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

       1 Dem_1_WR_1          3        2.00000       1  Dem_1        -1               100.000 c M&I Demand _1
Municipal Demand _1
       2 Dem_2_WR_1          3        6.00000       1  Dem_2        -1                60.000 c Irrigation Demand _2
Irrigation Demand _2
       3 Dem_3_WR_1          3        7.00000       1  Dem_3        -1               100.000 c Irrigation Demand _3
Irrigation Demand _3
       4 ISF_WR_1            1        9.00000       1  ISF          -1                65.500 c Instream Flow 1
Instream Demand
       5 Dem_4_WR_1          3       10.00000       1  Dem_4        -1               100.000 c Irrigation Demand _4
Irrigation Demand _4
       6 Dem_5_WR_1          3       15.00000       1  Dem_5        -1               100.000 c Irrigation Demand _5
Irrigation Demand _5
       7 Wel_1_Wr#1          6       20.00000       1  Wel_1        -1                10.000 c Wel_1 to Wel_1
Well Structure 1
       8 Wel_2_Wr#1          6       20.00000       1  Wel_2        -1                 5.000 c Wel_2 to Wel_2
Well Structure 2
       9 Wel_3_Wr#1          6       20.00000       1  Wel_3        Dem_3             50.000 c Wel_3 to Dem_3
Well_3 to Dem_3           Irrigation Demand _3       6   3
      10 Wel_3_Wr#2          6       20.00000       1  Wel_3        Dem_3              5.000 c Wel_4 to Dem_3
Well_3 to Dem_3           Irrigation Demand _3       6   4
#
# ________________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex7.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 14: 8:29
# Time Step:         Monthly
#
# ________________________________________________________________________________

   Diversion Summary  ACFT
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    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow
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    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1     5000.   297525.   307442.
      Well Rights             :     2       55.     3273.     3382.


Shortage                 Water Use
                                        Demand              From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3        1979  OCT   1000.    500.      0.      0.      0.      0.   1000.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   1000.      0.      0.      0.   1000.
0.    125.    875.      0. Dem_1           100.000
Dem_3       Dem_3        1979  NOV   1000.    500.    778.      0.      0.      0.    222.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   1000.      0.    125.      0.    875.
778.     28.     69.     0. NA                -1.000
Dem_3       Dem_3        1979  DEC   1000.    500.    694.      0.      0.      0.    306.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   1000.      0.    153.      0.    847.
694.     38.    115.     0. NA                -1.000
Dem_3       Dem_3        1980  JAN   1000.    500.    544.      0.      0.      0.    456.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   1000.      0.    191.      0.    809.
544.     57.    208.     0. NA                -1.000
Dem_3       Dem_3        1980  FEB   1000.    500.    634.      0.      0.      0.    366.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   1000.      0.    123.      0.    877.
634.     46.    197.     0. NA                -1.000
Dem_3       Dem_3        1980  MAR   1000.    500.    607.      0.      0.      0.    393.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   1000.      0.    141.      0.    859.
607.     49.    203.     0. NA                -1.000
Dem_3       Dem_3        1980  APR   1000.    500.    602.      0.      0.      0.    398.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   1000.      0.    152.      0.    848.
602.     50.    196.     0. NA                -1.000
Dem_3       Dem_3        1980  MAY   1000.    500.   1000.      0.      0.      0.      0.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   5000.      0.    145.      0.   4855.
1000.     0.   3855.   3855. NA                -1.000
Dem_3       Dem_3        1980  JUN   1000.    500.   1000.      0.      0.      0.      0.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   5000.      0.     99.      0.   4901.
1000.     0.   3901.   3901. NA                -1.000
Dem_3       Dem_3        1980  JUL   1000.    500.    899.      0.      0.      0.    101.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   1000.      0.     50.      0.    950.
899.     13.     39.     0. NA                -1.000
Dem_3       Dem_3        1980  AUG   1000.    500.    781.      0.      0.      0.    219.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   1000.      0.     13.      0.    987.
781.     27.    179.     0. NA                -1.000
Dem_3       Dem_3        1980  SEP   1000.    500.    745.      0.      0.      0.    255.      0.      0.      0.
0.     0.   1000.       0.      0.    500.      0.    500.      0.      0.   1000.      0.     40.      0.    960.
745.     32.    183.     0. NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_3       Dem_3        1980  TOT  12000.   6000.   8284.      0.      0.      0.   3716.      0.      0.      0.
0.     0.  12000.       0.      0.   6000.      0.   6000.      0.      0.  20000.      0.   1231.      0.  18769.
8284.    464.  10021.   7757. NA                -1.000


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    RIVER LOCATION - FROM     : Wel_3        Exist. Well_3
    RIVER LOCATION - TO       : Wel_3        Exist. Well_3


Shortage                 Water Use
                                        Demand              From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
```

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NA          Wel_3        1979  OCT      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1979  NOV      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1979  DEC      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  JAN      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  FEB      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  MAR      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  APR      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  MAY      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  JUN      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  JUL      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  AUG      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  SEP      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
NA          Wel_3        1980  TOT      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0.      0.      0.       0.       0.       0.       0.       0.       0.       0.       0.       0.
0.      0.      0.      0. NA                -1.000


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    STRUCTURE ID (0 = total)  : Dem_4              2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4        Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4        Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                   ============= ==============================    From    ====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
=================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_4       Dem_4        1979  OCT    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    875.      0.    250.      0.      0.   1125.
0.      0.   1125.     0. Dem_1             100.000
Dem_4       Dem_4        1979  NOV    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.     69.      0.    500.      0.      0.    569.
0.      0.    569.     0. ISF               100.000
Dem_4       Dem_4        1979  DEC    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    115.      0.    500.      0.      0.    615.
0.      0.    615.     0. ISF               100.000
Dem_4       Dem_4        1980  JAN    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    208.      0.    500.      0.      0.    708.
0.      0.    708.     0. ISF               100.000
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Dem_4       Dem_4       1980  FEB    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    197.      0.    500.      0.      0.    697.
0.      0.    697.      0. Dem_1           100.000
Dem_4       Dem_4       1980  MAR    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    203.      0.    500.      0.      0.    703.
0.      0.    703.      0. Dem_1           100.000
Dem_4       Dem_4       1980  APR    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    196.      0.    500.      0.      0.    696.
0.      0.    696.      0. Dem_1           100.000
Dem_4       Dem_4       1980  MAY    500.    250.    500.      0.      0.      0.      0.      0.      0.      0.
0.      0.    500.      0.      0.    250.      0.    250.      0.   3855.      0.    500.      0.      0.   4355.
500.      0.   3855.   3855. NA              -1.000
Dem_4       Dem_4       1980  JUN    500.    250.    500.      0.      0.      0.      0.      0.      0.      0.
0.      0.    500.      0.      0.    250.      0.    250.      0.   3901.      0.    500.      0.      0.   4401.
500.      0.   3901.   3901. NA              -1.000
Dem_4       Dem_4       1980  JUL    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.     39.      0.    500.      0.      0.    539.
0.      0.    539.      0. ISF             100.000
Dem_4       Dem_4       1980  AUG    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    179.      0.    500.      0.      0.    679.
0.      0.    679.      0. Dem_1           100.000
Dem_4       Dem_4       1980  SEP      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    183.      0.    500.      0.      0.    683.
0.      0.    683.      0. ISF             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_4       Dem_4       1980  TOT   5500.   2750.   1000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1000.   4500.   2250.    500.      0.    500.      0.  10021.      0.   5750.      0.      0.  15771.
1000.      0.  14771.   7757. NA              -1.000


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    STRUCTURE ID (0 = total)  : Dem_5              -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                       Demand              From River By                  From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID          Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5       1979  OCT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_1           100.000
Dem_5       Dem_5       1979  NOV      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5       1979  DEC      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5       1980  JAN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5       1980  FEB      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5       1980  MAR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5       1980  APR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5       1980  MAY      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.  15000.      0.      0.      0.  15000.
0.      0.  15000.  12000. NA              -1.000
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Dem_5       Dem_5        1980  JUN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.  15000.      0.      0.      0.  15000.
0.      0.  15000.  12000. NA               -1.000
Dem_5       Dem_5        1980  JUL      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5        1980  AUG      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5        1980  SEP      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_5       Dem_5        1980  TOT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.  60000.      0.      0.      0.  60000.
0.      0.  60000.  24000. NA               -1.000


   Diversion Summary  ACFT
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    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2       Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2       Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                      Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total          Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
======================================= =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2        1979  OCT   3000.   1500.   2833.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2833.    167.     83.   1417.      0.   1417.      0.   3000.      0.      0.      0.      0.   3000.
2833.      0.    167.      0. Dem_1            100.000
Dem_2       Dem_2        1979  NOV   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1979  DEC   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  JAN   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  FEB   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  MAR   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  APR   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  MAY   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.  15000.      0.      0.      0.      0.  15000.
3000.      0.  12000.  12000. NA                -1.000
Dem_2       Dem_2        1980  JUN   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.  15000.      0.      0.      0.      0.  15000.
3000.      0.  12000.  12000. NA                -1.000
Dem_2       Dem_2        1980  JUL   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  AUG   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  SEP   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
```

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___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ __________
Dem_2       Dem_2        1980  TOT  36000.  18000.  35833.      0.      0.      0.      0.      0.      0.      0.
0.      0.  35833.    167.     83.  17917.      0.  17917.      0.  60000.      0.      0.      0.      0.  60000.
35833.      0.  24167.  24000. NA                -1.000


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    STRUCTURE ID (0 = total)  : Wel_2           12502
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Well Structure 2
    RIVER LOCATION - FROM     : Wel_2        Exist. Well_2
    RIVER LOCATION - TO       : Wel_2        Exist. Well_2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Well Capacity           :     1     5000.   297525.   307442.
      Well Rights             :     1        5.      298.      307.



Shortage                 Water Use
                                        Demand               From River By                    From Carrier By
Carried                 ============== ===============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
====================================== ==========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Wel_2       Wel_2        1979  OCT   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Dem_1            100.000
Wel_2       Wel_2        1979  NOV   1000.    500.      0.      0.      0.      0.    298.      0.      0.      0.
0.      0.    298.    702.    351.    149.      0.    149.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. ISF              100.000
Wel_2       Wel_2        1979  DEC   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. ISF              100.000
Wel_2       Wel_2        1980  JAN   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. ISF              100.000
Wel_2       Wel_2        1980  FEB   1000.    500.      0.      0.      0.      0.    278.      0.      0.      0.
0.      0.    278.    722.    361.    139.      0.    139.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Dem_1            100.000
Wel_2       Wel_2        1980  MAR   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Dem_1            100.000
Wel_2       Wel_2        1980  APR   1000.    500.      0.      0.      0.      0.    298.      0.      0.      0.
0.      0.    298.    702.    351.    149.      0.    149.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Dem_1            100.000
Wel_2       Wel_2        1980  MAY   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_2       Wel_2        1980  JUN   1000.    500.      0.      0.      0.      0.    298.      0.      0.      0.
0.      0.    298.    702.    351.    149.      0.    149.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_2       Wel_2        1980  JUL   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. ISF              100.000
Wel_2       Wel_2        1980  AUG   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Dem_1            100.000
Wel_2       Wel_2        1980  SEP   1000.    500.      0.      0.      0.      0.    298.      0.      0.      0.
0.      0.    298.    702.    351.    149.      0.    149.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. ISF              100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ __________
Wel_2       Wel_2        1980  TOT  12000.   6000.      0.      0.      0.      0.   3620.      0.      0.      0.
0.      0.   3620.   8380.   4190.   1810.      0.   1810.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA               -1.000


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    RIVER LOCATION - FROM     : Riv_50       Confluence
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    RIVER LOCATION - TO       : Riv_50       Confluence


Shortage                 Water Use
                                        Demand              From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total             Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                 Station Balance
====================================== =========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
NA          Riv_50       1979  OCT      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.   1292.      0.      0.      0.      0.   1292.
0.      0.   1292.      0. NA               -1.000
NA          Riv_50       1979  NOV      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.    569.      0.      0.      0.      0.    569.
0.      0.    569.      0. NA               -1.000
NA          Riv_50       1979  DEC      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.    615.      0.      0.      0.      0.    615.
0.      0.    615.      0. NA               -1.000
NA          Riv_50       1980  JAN      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.    708.      0.      0.      0.      0.    708.
0.      0.    708.      0. NA               -1.000
NA          Riv_50       1980  FEB      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.    697.      0.      0.      0.      0.    697.
0.      0.    697.      0. NA               -1.000
NA          Riv_50       1980  MAR      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.    703.      0.      0.      0.      0.    703.
0.      0.    703.      0. NA               -1.000
NA          Riv_50       1980  APR      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.    696.      0.      0.      0.      0.    696.
0.      0.    696.      0. NA               -1.000
NA          Riv_50       1980  MAY      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.  15855.      0.    125.      0.      0.  15980.
0.      0.  15980.  12386. NA               -1.000
NA          Riv_50       1980  JUN      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.  15901.      0.    250.      0.      0.  16151.
0.      0.  16151.  12749. NA               -1.000
NA          Riv_50       1980  JUL      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.    539.      0.    125.      0.      0.    664.
0.      0.    664.      0. NA               -1.000
NA          Riv_50       1980  AUG      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.    679.      0.      0.      0.      0.    679.
0.      0.    679.      0. NA               -1.000
NA          Riv_50       1980  SEP      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.    683.      0.      0.      0.      0.    683.
0.      0.    683.      0. NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
NA          Riv_50       1980  TOT      0.       0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.       0.      0.      0.  38938.      0.    500.      0.      0.  39438.
0.      0.  39438.  25135. NA               -1.000


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    STRUCTURE ID (0 = total)  : Dem_1              5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand              From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total             Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow
```

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            Station In/Out                              Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.   1292.      0.    785.      0.      0.   2077.
2000.     77.      0.      0. NA               -1.000
Dem_1       Dem_1        1979  NOV   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.    569.      0.   1610.     77.      0.   2102.
2000.     74.     28.      0. NA               -1.000
Dem_1       Dem_1        1979  DEC   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.    615.      0.   1651.    151.      0.   2115.
2000.     77.     38.      0. NA               -1.000
Dem_1       Dem_1        1980  JAN   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.    708.      0.   1654.    228.      0.   2134.
2000.     77.     57.      0. NA               -1.000
Dem_1       Dem_1        1980  FEB   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.    697.      0.   1646.    228.      0.   2115.
2000.     69.     46.      0. NA               -1.000
Dem_1       Dem_1        1980  MAR   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.    703.      0.   1646.    223.      0.   2126.
2000.     77.     49.      0. NA               -1.000
Dem_1       Dem_1        1980  APR   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.    696.      0.   1651.    223.      0.   2124.
2000.     74.     50.      0. NA               -1.000
Dem_1       Dem_1        1980  MAY   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.  15980.      0.   1651.    221.      0.  17411.
2000.     77.  15334.  12386. NA               -1.000
Dem_1       Dem_1        1980  JUN   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.  16151.      0.   1651.    228.      0.  17574.
2000.     74.  15500.  12749. NA               -1.000
Dem_1       Dem_1        1980  JUL   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.    664.      0.   1651.    226.      0.   2090.
2000.     77.     13.      0. NA               -1.000
Dem_1       Dem_1        1980  AUG   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.    679.      0.   1654.    228.      0.   2104.
2000.     77.     27.      0. NA               -1.000
Dem_1       Dem_1        1980  SEP   2000.    400.   2000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.      0.      0.    400.      0.   1600.      0.    683.      0.   1651.    228.      0.   2106.
2000.     74.     32.      0. NA               -1.000
___________ __________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_1       Dem_1        1980  TOT  24000.   4800.  24000.      0.      0.      0.      0.      0.      0.      0.
0.      0.  24000.      0.      0.   4800.      0.  19200.      0.  39438.      0.  18902.   2261.      0.  56079.
24000.    905.  31174.  25135. NA               -1.000


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    STRUCTURE ID (0 = total)  : Wel_1           12501
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Well Structure 1
    RIVER LOCATION - FROM     : Wel_1        Exist. Well_1
    RIVER LOCATION - TO       : Wel_1        Exist. Well_1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Well Capacity           :     1     5000.   297525.   307442.
      Well Rights             :     1       10.      595.      615.



Shortage                 Water Use
                                           Demand              From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                    ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To     Total           Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Wel_1       Wel_1        1979  OCT   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit      -1.000
Wel_1       Wel_1        1979  NOV   3000.   1500.      0.      0.      0.      0.    595.      0.      0.      0.
0.      0.    595.   2405.   1202.    298.      0.    149.    149.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit      -1.000
Wel_1       Wel_1        1979  DEC   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit      -1.000
```

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Wel_1       Wel_1        1980  JAN   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  FEB   3000.   1500.      0.      0.      0.      0.    555.      0.      0.      0.
0.      0.    555.   2445.   1222.    278.      0.    139.    139.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  MAR   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  APR   3000.   1500.      0.      0.      0.      0.    595.      0.      0.      0.
0.      0.    595.   2405.   1202.    298.      0.    149.    149.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  MAY   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  JUN   3000.   1500.      0.      0.      0.      0.    595.      0.      0.      0.
0.      0.    595.   2405.   1202.    298.      0.    149.    149.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  JUL   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  AUG   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  SEP   3000.   1500.      0.      0.      0.      0.    595.      0.      0.      0.
0.      0.    595.   2405.   1202.    298.      0.    149.    149.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
___________ __________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ __________
Wel_1       Wel_1        1980  TOT  36000.  18000.      0.      0.      0.      0.   7240.      0.      0.      0.
0.      0.   7240.  28760.  14380.   3620.      0.   1810.   1810.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex7.* data set
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    STRUCTURE ID (0 = total)  : ISF              5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF          Top Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                          Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
=================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF          1979  OCT   4027.      0.    640.      0.      0.      0.      0.      0.      0.      0.
0.      0.    640.   3387.      0.      0.      0.    640.      0.      0.      0.    717.      0.     77.    794.
640.    154.    640.      0. Hgate_Limit       -1.000
ISF         ISF          1979  NOV   3898.      0.    997.      0.      0.      0.      0.      0.      0.      0.
0.      0.    997.   2901.      0.      0.      0.    997.      0.     28.      0.   1271.    154.      0.   1145.
997.    149.    997.      0. Hgate_Limit       -1.000
ISF         ISF          1979  DEC   4027.      0.   1250.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1250.   2777.      0.      0.      0.   1250.      0.     38.      0.   1591.    302.     77.   1404.
1250.    154.   1250.      0. Hgate_Limit       -1.000
ISF         ISF          1980  JAN   4027.      0.   1201.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1201.   2827.      0.      0.      0.   1201.      0.     57.      0.   1754.    456.      0.   1355.
1201.    154.   1201.      0. Hgate_Limit       -1.000
ISF         ISF          1980  FEB   3638.      0.   1266.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1266.   2371.      0.      0.      0.   1266.      0.     46.      0.   1746.    456.     69.   1405.
1266.    139.   1266.      0. Hgate_Limit       -1.000
ISF         ISF          1980  MAR   4027.      0.   1195.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1195.   2832.      0.      0.      0.   1195.      0.     49.      0.   1746.    446.      0.   1349.
1195.    154.   1195.      0. Hgate_Limit       -1.000
ISF         ISF          1980  APR   3898.      0.   1280.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1280.   2617.      0.      0.      0.   1280.      0.     50.      0.   1751.    446.     74.   1429.
1280.    149.   1280.      0. Hgate_Limit       -1.000
```

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ISF         ISF          1980  MAY   4027.      0.   4027.      0.      0.      0.      0.      0.      0.      0.
0.      0.   4027.      0.      0.      0.      0.   4027.      0.  15334.      0.   1751.    441.    -77.  16567.
4027.    154.  16413.  12386. NA               -1.000
ISF         ISF          1980  JUN   3898.      0.   3898.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3898.      0.      0.      0.      0.   3898.      0.  15500.      0.   1751.    456.      0.  16795.
3898.    149.  16646.  12749. NA               -1.000
ISF         ISF          1980  JUL   4027.      0.   1236.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1236.   2792.      0.      0.      0.   1236.      0.     13.      0.   1751.    451.     77.   1390.
1236.    154.   1236.      0. Hgate_Limit      -1.000
ISF         ISF          1980  AUG   4027.      0.   1248.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1248.   2780.      0.      0.      0.   1248.      0.     27.      0.   1754.    456.     77.   1402.
1248.    154.   1248.      0. Hgate_Limit      -1.000
ISF         ISF          1980  SEP   3898.      0.   1178.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1178.   2719.      0.      0.      0.   1178.      0.     32.      0.   1751.    456.      0.   1327.
1178.    149.   1178.      0. Hgate_Limit      -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
ISF         ISF          1980  TOT  47421.      0.  19417.      0.      0.      0.      0.      0.      0.      0.
0.      0.  19417.  28004.      0.      0.      0.  19417.      0.  31174.      0.  19336.   4522.    374.  46361.
19417.   1810.  44551.  25135. NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex7.* data set
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    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Bottom Instream Flow
    RIVER LOCATION - FROM     : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow



Shortage                 Water Use
                                        Demand             From River By                   From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01       1979  OCT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    640.      0.      0.      0.      0.    640.
0.      0.    640.      0. NA               -1.000
Baseflow    ISF.01       1979  NOV      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    997.      0.      0.      0.      0.    997.
0.      0.    997.      0. NA               -1.000
Baseflow    ISF.01       1979  DEC      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1250.      0.      0.      0.      0.   1250.
0.      0.   1250.      0. NA               -1.000
Baseflow    ISF.01       1980  JAN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1201.      0.      0.      0.      0.   1201.
0.      0.   1201.      0. NA               -1.000
Baseflow    ISF.01       1980  FEB      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1266.      0.      0.      0.      0.   1266.
0.      0.   1266.      0. NA               -1.000
Baseflow    ISF.01       1980  MAR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1195.      0.      0.      0.      0.   1195.
0.      0.   1195.      0. NA               -1.000
Baseflow    ISF.01       1980  APR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1280.      0.      0.      0.      0.   1280.
0.      0.   1280.      0. NA               -1.000
Baseflow    ISF.01       1980  MAY      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.  16413.      0.      0.      0.      0.  16413.
0.      0.  16413.  12386. NA               -1.000
Baseflow    ISF.01       1980  JUN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.  16646.      0.      0.      0.      0.  16646.
0.      0.  16646.  12749. NA               -1.000
Baseflow    ISF.01       1980  JUL      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1236.      0.      0.      0.      0.   1236.
0.      0.   1236.      0. NA               -1.000
Baseflow    ISF.01       1980  AUG      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1248.      0.      0.      0.      0.   1248.
0.      0.   1248.      0. NA               -1.000
Baseflow    ISF.01       1980  SEP      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1178.      0.      0.      0.      0.   1178.
0.      0.   1178.      0. NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
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Baseflow    ISF.01       1980  TOT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.  44551.      0.      0.      0.      0.  44551.
0.      0.  44551.  25135. NA               -1.000

#
#
# ________________________________________________________________________________
# *.xwe       Well Structure Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex7.* data set
#
# Statemod Version: 12.29.05 Date = 2008/10/23)
# Run date:          11/ 7/ 8  6:29:30
# Time Step:         Monthly
#
# ________________________________________________________________________________
```

Well Water Only Summary ACFT
STATEMOD
StateMod Operating Rule Example - ex7.* data set
PAGE NO.   1

STRUCTURE ID (0 _ total) : Wel_1
STRUCTURE ACCT (0 _ total): 0
STRUCTURE NAME   : Well Structure 1

STRUCTURE DATA	#	cfs	af@30	af@31
Well Capacity	1	5000.	297525.	307442.
Well Rights	1	10.	595.	615.

Structure ID	River ID	Year	Mo	Demand: Total Demand (1)	Demand: CU Demand (2)	Water Supply: From Well (3)	Water Supply: From SW (4)	Water Supply: From Soil (5)	Water Supply: Total Supply (6)	Short: Total Short (7)	Short: CU Short (8)	Water Use: Total CU (9)	Water Use: To Soil (10)	Water Use: Total Return (11)	Water Use: Loss (12)	River Carried (13)	Total Use (14)	Water Source: From River (15)	Water Source: From GwStor (16)	Water Source: From Salvage (17)	Water Source: From Soil (18)	Water Source: Total Source (19)
				N/A	N/A	(+)	(+)	(+)	N/A	N/A	N/A	(+)	(+)	(+)	(+)	(+)	N/A	(+)	(+)	(+)	(+)	N/A
Wel_1	Wel_1	1979	OCT	3000.	1500.	615.	0.	0.	615.	2385.	1193.	307.	0.	154.	154.	0.	615.	154.	461.	0.	0.	615.
Wel_1	Wel_1	1979	OCT	3000.0	1500.0	614.9	0.0	0.0	614.9	2385.1	1192.6	307.4	0.0	153.7	153.7	0.0	614.9	153.7	461.2	0.0	0.0	614.9
Wel_1	Wel_1	1979	OCT	3000.00	1500.00	614.89	0.00	0.00	614.89	2385.11	1192.56	307.44	0.00	153.72	153.72	0.00	614.89	153.72	461.16	0.00	0.00	614.89
Wel_1	Wel_1	1979	NOV	3000.	1500.	595.	0.	0.	595.	2405.	1202.	298.	0.	149.	149.	0.	595.	149.	446.	0.	0.	595.
Wel_1	Wel_1	1979	NOV	3000.0	1500.0	595.0	0.0	0.0	595.0	2404.9	1202.5	297.5	0.0	148.8	148.8	0.0	595.0	148.8	446.3	0.0	0.0	595.0
Wel_1	Wel_1	1979	NOV	3000.00	1500.00	595.05	0.00	0.00	595.05	2404.95	1202.47	297.52	0.00	148.76	148.76	0.00	595.05	148.76	446.29	0.00	0.00	595.05
Wel_1	Wel_1	1979	DEC	3000.	1500.	615.	0.	0.	615.	2385.	1193.	307.	0.	154.	154.	0.	615.	154.	461.	0.	0.	615.
Wel_1	Wel_1	1979	DEC	3000.0	1500.0	614.9	0.0	0.0	614.9	2385.1	1192.6	307.4	0.0	153.7	153.7	0.0	614.9	153.7	461.2	0.0	0.0	614.9
Wel_1	Wel_1	1979	DEC	3000.00	1500.00	614.89	0.00	0.00	614.89	2385.11	1192.56	307.44	0.00	153.72	153.72	0.00	614.89	153.72	461.16	0.00	0.00	614.89
Wel_1	Wel_1	1980	JAN	3000.	1500.	615.	0.	0.	615.	2385.	1193.	307.	0.	154.	154.	0.	615.	154.	461.	0.	0.	615.
Wel_1	Wel_1	1980	JAN	3000.0	1500.0	614.9	0.0	0.0	614.9	2385.1	1192.6	307.4	0.0	153.7	153.7	0.0	614.9	153.7	461.2	0.0	0.0	614.9
Wel_1	Wel_1	1980	JAN	3000.00	1500.00	614.89	0.00	0.00	614.89	2385.11	1192.56	307.44	0.00	153.72	153.72	0.00	614.89	153.72	461.16	0.00	0.00	614.89
Wel_1	Wel_1	1980	FEB	3000.	1500.	555.	0.	0.	555.	2445.	1222.	278.	0.	139.	139.	0.	555.	139.	417.	0.	0.	555.
Wel_1	Wel_1	1980	FEB	3000.0	1500.0	555.4	0.0	0.0	555.4	2444.6	1222.3	277.7	0.0	138.8	138.8	0.0	555.4	138.8	416.5	0.0	0.0	555.4
Wel_1	Wel_1	1980	FEB	3000.00	1500.00	555.38	0.00	0.00	555.38	2444.62	1222.31	277.69	0.00	138.85	138.85	0.00	555.38	138.85	416.54	0.00	0.00	555.38
Wel_1	Wel_1	1980	MAR	3000.	1500.	615.	0.	0.	615.	2385.	1193.	307.	0.	154.	154.	0.	615.	154.	461.	0.	0.	615.
Wel_1	Wel_1	1980	MAR	3000.0	1500.0	614.9	0.0	0.0	614.9	2385.1	1192.6	307.4	0.0	153.7	153.7	0.0	614.9	153.7	461.2	0.0	0.0	614.9
Wel_1	Wel_1	1980	MAR	3000.00	1500.00	614.89	0.00	0.00	614.89	2385.11	1192.56	307.44	0.00	153.72	153.72	0.00	614.89	153.72	461.16	0.00	0.00	614.89
Wel_1	Wel_1	1980	APR	3000.	1500.	595.	0.	0.	595.	2405.	1202.	298.	0.	149.	149.	0.	595.	149.	446.	0.	0.	595.
Wel_1	Wel_1	1980	APR	3000.0	1500.0	595.0	0.0	0.0	595.0	2404.9	1202.5	297.5	0.0	148.8	148.8	0.0	595.0	148.8	446.3	0.0	0.0	595.0
Wel_1	Wel_1	1980	APR	3000.00	1500.00	595.05	0.00	0.00	595.05	2404.95	1202.47	297.52	0.00	148.76	148.76	0.00	595.05	148.76	446.29	0.00	0.00	595.05
Wel_1	Wel_1	1980	MAY	3000.	1500.	615.	0.	0.	615.	2385.	1193.	307.	0.	154.	154.	0.	615.	154.	461.	0.	0.	615.
Wel_1	Wel_1	1980	MAY	3000.0	1500.0	614.9	0.0	0.0	614.9	2385.1	1192.6	307.4	0.0	153.7	153.7	0.0	614.9	153.7	461.2	0.0	0.0	614.9
Wel_1	Wel_1	1980	MAY	3000.00	1500.00	614.89	0.00	0.00	614.89	2385.11	1192.56	307.44	0.00	153.72	153.72	0.00	614.89	153.72	461.16	0.00	0.00	614.89
Wel_1	Wel_1	1980	JUN	3000.	1500.	595.	0.	0.	595.	2405.	1202.	298.	0.	149.	149.	0.	595.	149.	446.	0.	0.	595.
Wel_1	Wel_1	1980	JUN	3000.0	1500.0	595.0	0.0	0.0	595.0	2404.9	1202.5	297.5	0.0	148.8	148.8	0.0	595.0	148.8	446.3	0.0	0.0	595.0
Wel_1	Wel_1	1980	JUN	3000.00	1500.00	595.05	0.00	0.00	595.05	2404.95	1202.47	297.52	0.00	148.76	148.76	0.00	595.05	148.76	446.29	0.00	0.00	595.05
Wel_1	Wel_1	1980	JUL	3000.	1500.	615.	0.	0.	615.	2385.	1193.	307.	0.	154.	154.	0.	615.	154.	461.	0.	0.	615.
Wel_1	Wel_1	1980	JUL	3000.0	1500.0	614.9	0.0	0.0	614.9	2385.1	1192.6	307.4	0.0	153.7	153.7	0.0	614.9	153.7	461.2	0.0	0.0	614.9

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Wel_1       Wel_1        1980  JUL 3000.00 1500.00  614.89    0.00    0.00  614.89 2385.11 1192.56  307.44    0.00
153.72  153.72    0.00  614.89  153.72  461.16    0.00    0.00  614.89
Wel_1       Wel_1        1980  AUG   3000.   1500.    615.      0.      0.    615.   2385.   1193.    307.      0.
154.    154.      0.    615.    154.    461.      0.      0.    615.
Wel_1       Wel_1        1980  AUG  3000.0  1500.0   614.9     0.0     0.0   614.9  2385.1  1192.6   307.4     0.0
153.7   153.7     0.0   614.9   153.7   461.2     0.0     0.0   614.9
Wel_1       Wel_1        1980  AUG 3000.00 1500.00  614.89    0.00    0.00  614.89 2385.11 1192.56  307.44    0.00
153.72  153.72    0.00  614.89  153.72  461.16    0.00    0.00  614.89
Wel_1       Wel_1        1980  SEP   3000.   1500.    595.      0.      0.    595.   2405.   1202.    298.      0.
149.    149.      0.    595.    149.    446.      0.      0.    595.
Wel_1       Wel_1        1980  SEP  3000.0  1500.0   595.0     0.0     0.0   595.0  2404.9  1202.5   297.5     0.0
148.8   148.8     0.0   595.0   148.8   446.3     0.0     0.0   595.0
Wel_1       Wel_1        1980  SEP 3000.00 1500.00  595.05    0.00    0.00  595.05 2404.95 1202.47  297.52    0.00
148.76  148.76    0.00  595.05  148.76  446.29    0.00    0.00  595.05
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______
Wel_1       Wel_1        1980  TOT  36000.  18000.   7240.      0.      0.   7240.  28760.  14380.   3620.      0.
1810.   1810.      0.   7240.   1810.   5430.      0.      0.   7240.
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Well Water Only Summary ACFT
STATEMOD
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STRUCTURE ID (0 _ total) : Wel_2
STRUCTURE ACCT (0 _ total): 0
STRUCTURE NAME   : Well Structure 2

STRUCTURE DATA	#	cfs	af@30	af@31
Well Capacity	1	5000.	297525.	307442.
Well Rights	1	5.	298.	307.

				Demand		Water Supply				Short				Water Use				Water Source				
Structure ID	River ID	Year	Mo	Total Demand N/A (1)	CU Demand N/A (2)	From Well (+) (3)	From SW (+) (4)	From Soil (+) (5)	Total Supply N/A (6)	Total Short N/A (7)	CU Short N/A (8)	Total CU (+) (9)	To Soil (+) (10)	Total Return (+) (11)	Loss (+) (12)	River Carried (+) (13)	Total Use N/A (14)	From River (+) (15)	From GwStor (+) (16)	From Salvage (+) (17)	From Soil (+) (18)	Total Source N/A (19)
Wel_2	Wel_2	1979	OCT	1000.	500.	307.	0.	0.	307.	693.	346.	154.	0.	154.	0.	0.	307.	77.	231.	0.	0.	307.
Wel_2	Wel_2	1979	OCT	1000.0	500.0	307.4	0.0	0.0	307.4	692.6	346.3	153.7	0.0	153.7	0.0	0.0	307.4	76.9	230.6	0.0	0.0	307.4
Wel_2	Wel_2	1979	OCT	1000.00	500.00	307.44	0.00	0.00	307.44	692.56	346.28	153.72	0.00	153.72	0.00	0.00	307.44	76.86	230.58	0.00	0.00	307.44
Wel_2	Wel_2	1979	NOV	1000.	500.	298.	0.	0.	298.	702.	351.	149.	0.	149.	0.	0.	298.	74.	223.	0.	0.	298.
Wel_2	Wel_2	1979	NOV	1000.0	500.0	297.5	0.0	0.0	297.5	702.5	351.2	148.8	0.0	148.8	0.0	0.0	297.5	74.4	223.1	0.0	0.0	297.5
Wel_2	Wel_2	1979	NOV	1000.00	500.00	297.52	0.00	0.00	297.52	702.48	351.24	148.76	0.00	148.76	0.00	0.00	297.52	74.38	223.14	0.00	0.00	297.52
Wel_2	Wel_2	1979	DEC	1000.	500.	307.	0.	0.	307.	693.	346.	154.	0.	154.	0.	0.	307.	77.	231.	0.	0.	307.
Wel_2	Wel_2	1979	DEC	1000.0	500.0	307.4	0.0	0.0	307.4	692.6	346.3	153.7	0.0	153.7	0.0	0.0	307.4	76.9	230.6	0.0	0.0	307.4
Wel_2	Wel_2	1979	DEC	1000.00	500.00	307.44	0.00	0.00	307.44	692.56	346.28	153.72	0.00	153.72	0.00	0.00	307.44	76.86	230.58	0.00	0.00	307.44
Wel_2	Wel_2	1980	JAN	1000.	500.	307.	0.	0.	307.	693.	346.	154.	0.	154.	0.	0.	307.	77.	231.	0.	0.	307.
Wel_2	Wel_2	1980	JAN	1000.0	500.0	307.4	0.0	0.0	307.4	692.6	346.3	153.7	0.0	153.7	0.0	0.0	307.4	76.9	230.6	0.0	0.0	307.4
Wel_2	Wel_2	1980	JAN	1000.00	500.00	307.44	0.00	0.00	307.44	692.56	346.28	153.72	0.00	153.72	0.00	0.00	307.44	76.86	230.58	0.00	0.00	307.44
Wel_2	Wel_2	1980	FEB	1000.	500.	278.	0.	0.	278.	722.	361.	139.	0.	139.	0.	0.	278.	69.	208.	0.	0.	278.
Wel_2	Wel_2	1980	FEB	1000.0	500.0	277.7	0.0	0.0	277.7	722.3	361.2	138.8	0.0	138.8	0.0	0.0	277.7	69.4	208.3	0.0	0.0	277.7
Wel_2	Wel_2	1980	FEB	1000.00	500.00	277.69	0.00	0.00	277.69	722.31	361.15	138.85	0.00	138.85	0.00	0.00	277.69	69.42	208.27	0.00	0.00	277.69
Wel_2	Wel_2	1980	MAR	1000.	500.	307.	0.	0.	307.	693.	346.	154.	0.	154.	0.	0.	307.	77.	231.	0.	0.	307.
Wel_2	Wel_2	1980	MAR	1000.0	500.0	307.4	0.0	0.0	307.4	692.6	346.3	153.7	0.0	153.7	0.0	0.0	307.4	76.9	230.6	0.0	0.0	307.4
Wel_2	Wel_2	1980	MAR	1000.00	500.00	307.44	0.00	0.00	307.44	692.56	346.28	153.72	0.00	153.72	0.00	0.00	307.44	76.86	230.58	0.00	0.00	307.44
Wel_2	Wel_2	1980	APR	1000.	500.	298.	0.	0.	298.	702.	351.	149.	0.	149.	0.	0.	298.	74.	223.	0.	0.	298.
Wel_2	Wel_2	1980	APR	1000.0	500.0	297.5	0.0	0.0	297.5	702.5	351.2	148.8	0.0	148.8	0.0	0.0	297.5	74.4	223.1	0.0	0.0	297.5
Wel_2	Wel_2	1980	APR	1000.00	500.00	297.52	0.00	0.00	297.52	702.48	351.24	148.76	0.00	148.76	0.00	0.00	297.52	74.38	223.14	0.00	0.00	297.52
Wel_2	Wel_2	1980	MAY	1000.	500.	307.	0.	0.	307.	693.	346.	154.	0.	154.	0.	0.	307.	77.	231.	0.	0.	307.
Wel_2	Wel_2	1980	MAY	1000.0	500.0	307.4	0.0	0.0	307.4	692.6	346.3	153.7	0.0	153.7	0.0	0.0	307.4	76.9	230.6	0.0	0.0	307.4
Wel_2	Wel_2	1980	MAY	1000.00	500.00	307.44	0.00	0.00	307.44	692.56	346.28	153.72	0.00	153.72	0.00	0.00	307.44	76.86	230.58	0.00	0.00	307.44
Wel_2	Wel_2	1980	JUN	1000.	500.	298.	0.	0.	298.	702.	351.	149.	0.	149.	0.	0.	298.	74.	223.	0.	0.	298.
Wel_2	Wel_2	1980	JUN	1000.0	500.0	297.5	0.0	0.0	297.5	702.5	351.2	148.8	0.0	148.8	0.0	0.0	297.5	74.4	223.1	0.0	0.0	297.5
Wel_2	Wel_2	1980	JUN	1000.00	500.00	297.52	0.00	0.00	297.52	702.48	351.24	148.76	0.00	148.76	0.00	0.00	297.52	74.38	223.14	0.00	0.00	297.52
Wel_2	Wel_2	1980	JUL	1000.	500.	307.	0.	0.	307.	693.	346.	154.	0.	154.	0.	0.	307.	77.	231.	0.	0.	307.
Wel_2	Wel_2	1980	JUL	1000.0	500.0	307.4	0.0	0.0	307.4	692.6	346.3	153.7	0.0	153.7	0.0	0.0	307.4	76.9	230.6	0.0	0.0	307.4

Wel_2 Wel_2 1980 JUL 1000.00 500.00 307.44 0.00 0.00 307.44 692.56 346.28 153.72 0.00
153.72 0.00 0.00 307.44 76.86 230.58 0.00 0.00 307.44
Wel_2 Wel_2 1980 AUG 1000. 500. 307. 0. 0. 307. 693. 346. 154. 0.
154. 0. 0. 307. 77. 231. 0. 0. 307.
Wel_2 Wel_2 1980 AUG 1000.0 500.0 307.4 0.0 0.0 307.4 692.6 346.3 153.7 0.0
153.7 0.0 0.0 307.4 76.9 230.6 0.0 0.0 307.4
Wel_2 Wel_2 1980 AUG 1000.00 500.00 307.44 0.00 0.00 307.44 692.56 346.28 153.72 0.00
153.72 0.00 0.00 307.44 76.86 230.58 0.00 0.00 307.44
Wel_2 Wel_2 1980 SEP 1000. 500. 298. 0. 0. 298. 702. 351. 149. 0.
149. 0. 0. 298. 74. 223. 0. 0. 298.
Wel_2 Wel_2 1980 SEP 1000.0 500.0 297.5 0.0 0.0 297.5 702.5 351.2 148.8 0.0
148.8 0.0 0.0 297.5 74.4 223.1 0.0 0.0 297.5
Wel_2 Wel_2 1980 SEP 1000.00 500.00 297.52 0.00 0.00 297.52 702.48 351.24 148.76 0.00
148.76 0.00 0.00 297.52 74.38 223.14 0.00 0.00 297.52
____________ ____________ _____ _____ ________ ________ ________ ________ ________ ________ ________ ________ ________ ________
________ ________ ________ ________ ________ ________ ________ ________
Wel_2 Wel_2 1980 TOT 12000. 6000. 3620. 0. 0. 3620. 8380. 4190. 1810. 0.
1810. 0. 0. 3620. 905. 2715. 0. 0. 3620.

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   Well Water Only Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex7.* data set
PAGE NO.   3

    STRUCTURE ID (0 _ total)  : Wel_3
    STRUCTURE ACCT (0 _ total): 0
    STRUCTURE NAME            : Well_3 to Dem_3


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Well Capacity           :     1     5000.   297525.   307442.
      Well Rights             :     2       55.     3273.     3382.

                                          Demand           Water  Supply              Short
Water Use                                Water Source
                                     _______________ _______________________________ _______________
______________________________________________ _______________________________________
                                        Total      CU    From    From    From   Total   Total      CU   Total      To
Total                   Total    From    From    From    From   Total
Structure   River                      Demand  Demand    Well      SW    Soil  Supply   Short   Short      CU    Soil
Return    Loss Carried      Use    River  GwStor Salvage    Soil  Source
ID          ID              Year   Mo      N/A     N/A     (+)     (+)     (+)     N/A     N/A     N/A     (+)     (+)
(+)     (+)     (+)     N/A     (+)     (+)     (+)     (+)     N/A
                                       ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)
___________ ___________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______
Wel_3       Dem_3        1979  OCT   1000.    500.   1000.      0.      0.   1000.      0.      0.    500.      0.
500.     0.      0.   1000.    125.    375.    500.      0.   1000.
Wel_3       Dem_3        1979  OCT  1000.0   500.0  1000.0     0.0     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0   125.0   375.0   500.0     0.0  1000.0
Wel_3       Dem_3        1979  OCT 1000.00  500.00 1000.00    0.00    0.00 1000.00    0.00    0.00  500.00    0.00
500.00   0.00    0.00 1000.00  125.00  375.00  500.00    0.00 1000.00
Wel_3       Dem_3        1979  NOV   1000.    500.    222.    778.      0.   1000.      0.      0.    500.      0.
500.     0.      0.   1000.    806.     83.    111.      0.   1000.
Wel_3       Dem_3        1979  NOV  1000.0   500.0   222.2   777.8     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0   805.6    83.3   111.1     0.0  1000.0
Wel_3       Dem_3        1979  NOV 1000.00  500.00  222.22  777.78    0.00 1000.00    0.00    0.00  500.00    0.00
500.00   0.00    0.00 1000.00  805.56   83.33  111.11    0.00 1000.00
Wel_3       Dem_3        1979  DEC   1000.    500.    306.    694.      0.   1000.      0.      0.    500.      0.
500.     0.      0.   1000.    732.    115.    153.      0.   1000.
Wel_3       Dem_3        1979  DEC  1000.0   500.0   306.2   693.8     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0   732.1   114.8   153.1     0.0  1000.0
Wel_3       Dem_3        1979  DEC 1000.00  500.00  306.18  693.82    0.00 1000.00    0.00    0.00  500.00    0.00
500.00   0.00    0.00 1000.00  732.09  114.82  153.09    0.00 1000.00
Wel_3       Dem_3        1980  JAN   1000.    500.    456.    544.      0.   1000.      0.      0.    500.      0.
500.     0.      0.   1000.    601.    171.    228.      0.   1000.
Wel_3       Dem_3        1980  JAN  1000.0   500.0   456.4   543.6     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0   600.7   171.1   228.2     0.0  1000.0
Wel_3       Dem_3        1980  JAN 1000.00  500.00  456.39  543.61    0.00 1000.00    0.00    0.00  500.00    0.00
500.00   0.00    0.00 1000.00  600.66  171.15  228.20    0.00 1000.00
Wel_3       Dem_3        1980  FEB   1000.    500.    366.    634.      0.   1000.      0.      0.    500.      0.
500.     0.      0.   1000.    680.    137.    183.      0.   1000.
Wel_3       Dem_3        1980  FEB  1000.0   500.0   365.8   634.2     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0   679.9   137.2   182.9     0.0  1000.0
Wel_3       Dem_3        1980  FEB 1000.00  500.00  365.79  634.21    0.00 1000.00    0.00    0.00  500.00    0.00
500.00   0.00    0.00 1000.00  679.93  137.17  182.89    0.00 1000.00
Wel_3       Dem_3        1980  MAR   1000.    500.    393.    607.      0.   1000.      0.      0.    500.      0.
500.     0.      0.   1000.    656.    147.    197.      0.   1000.
Wel_3       Dem_3        1980  MAR  1000.0   500.0   393.0   607.0     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0   656.1   147.4   196.5     0.0  1000.0
Wel_3       Dem_3        1980  MAR 1000.00  500.00  393.02  606.98    0.00 1000.00    0.00    0.00  500.00    0.00
500.00   0.00    0.00 1000.00  656.11  147.38  196.51    0.00 1000.00
Wel_3       Dem_3        1980  APR   1000.    500.    398.    602.      0.   1000.      0.      0.    500.      0.
500.     0.      0.   1000.    652.    149.    199.      0.   1000.
Wel_3       Dem_3        1980  APR  1000.0   500.0   397.6   602.4     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0   652.1   149.1   198.8     0.0  1000.0
Wel_3       Dem_3        1980  APR 1000.00  500.00  397.58  602.42    0.00 1000.00    0.00    0.00  500.00    0.00
500.00   0.00    0.00 1000.00  652.12  149.09  198.79    0.00 1000.00
Wel_3       Dem_3        1980  MAY   1000.    500.      0.   1000.      0.   1000.      0.      0.    500.      0.
500.     0.      0.   1000.   1000.      0.      0.      0.   1000.
Wel_3       Dem_3        1980  MAY  1000.0   500.0     0.0  1000.0     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0  1000.0     0.0     0.0     0.0  1000.0
Wel_3       Dem_3        1980  MAY 1000.00  500.00    0.00 1000.00    0.00 1000.00    0.00    0.00  500.00    0.00
500.00   0.00    0.00 1000.00 1000.00    0.00    0.00    0.00 1000.00
Wel_3       Dem_3        1980  JUN   1000.    500.      0.   1000.      0.   1000.      0.      0.    500.      0.
500.     0.      0.   1000.   1000.      0.      0.      0.   1000.
Wel_3       Dem_3        1980  JUN  1000.0   500.0     0.0  1000.0     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0  1000.0     0.0     0.0     0.0  1000.0
Wel_3       Dem_3        1980  JUN 1000.00  500.00    0.00 1000.00    0.00 1000.00    0.00    0.00  500.00    0.00
500.00   0.00    0.00 1000.00 1000.00    0.00    0.00    0.00 1000.00
Wel_3       Dem_3        1980  JUL   1000.    500.    101.    899.      0.   1000.      0.      0.    500.      0.
500.     0.      0.   1000.    911.     38.     51.      0.   1000.
Wel_3       Dem_3        1980  JUL  1000.0   500.0   101.3   898.7     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0   911.4    38.0    50.6     0.0  1000.0
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Wel_3       Dem_3        1980  JUL 1000.00  500.00  101.25  898.75    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  911.40   37.97   50.63    0.00 1000.00
Wel_3       Dem_3        1980  AUG   1000.    500.    219.    781.      0.   1000.      0.      0.    500.      0.
500.     0.     0.   1000.    809.     82.    109.      0.   1000.
Wel_3       Dem_3        1980  AUG  1000.0   500.0   218.5   781.5     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0   808.8    81.9   109.3     0.0  1000.0
Wel_3       Dem_3        1980  AUG 1000.00  500.00  218.53  781.47    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  808.79   81.95  109.27    0.00 1000.00
Wel_3       Dem_3        1980  SEP   1000.    500.    255.    745.      0.   1000.      0.      0.    500.      0.
500.     0.     0.   1000.    777.     96.    127.      0.   1000.
Wel_3       Dem_3        1980  SEP  1000.0   500.0   255.0   745.0     0.0  1000.0     0.0     0.0   500.0     0.0
500.0    0.0     0.0  1000.0   776.9    95.6   127.5     0.0  1000.0
Wel_3       Dem_3        1980  SEP 1000.00  500.00  254.95  745.05    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  776.92   95.61  127.48    0.00 1000.00
___________ ___________  _____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______
Wel_3       Dem_3        1980  TOT  12000.   6000.   3716.   8284.      0.  12000.      0.      0.   6000.      0.
6000.      0.      0.  12000.   8749.   1393.   1858.      0.  12000.

#
# ________________________________________________________________________________
# *.xgw       Ground Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex7.* data set
#
# Statemod Version: 12.29.05 Date = 2008/10/23)
# Run date:          11/ 7/ 8  6:29:30
# Time Step:         Monthly
#
# ________________________________________________________________________________

                               Ground Water Budget  ACFT

                           From/To      From        From        Total               From River     Well
Reservoir     Reservoir
Year   Mo    Recharge      GWStorage    SoilM       Plan       Inflow     Divert       by Well    Depletion
Evaporation    Seepage

 Stream    Reservoir     To     SoilM     Total
Outflow     Change     SoilM    Change     Outflow     Delta   CU    Loss   Pumping    Salvage
======== ============ ======= ========== =========== ======== ===== ======= ========= =========
 1979 OCT        3978.        356.          0.         -1.       4333.       1922.       1752.        154.         77.
-1.      3905.        428.        500.
 1979 NOV        4046.        251.        356.         -1.       4653.       1115.       3381.        149.          0.
-1.      4644.          8.        111.
 1979 DEC        4061.        269.        607.         -1.       4937.       1229.       3742.        154.         77.
-1.      5202.       -265.        153.
 1980 JAN        4061.        288.        875.         -1.       5224.       1379.       3907.        154.          0.
-1.      5440.       -216.        228.
 1980 FEB        4017.        254.        807.         -1.       5078.       1199.       3893.        139.         69.
-1.      5300.       -222.        183.
 1980 MAR        4061.        280.        810.         -1.       5151.       1315.       3893.        154.          0.
-1.      5362.       -210.        197.
 1980 APR        4046.        273.        821.         -1.       5140.       1290.       3902.        149.         74.
-1.      5416.       -275.        199.
 1980 MAY        4311.        231.        807.         -1.       5348.        922.       4027.        154.        -77.
-1.      5027.        322.          0.
 1980 JUN        4296.        223.        783.         -1.       5303.        893.       4152.        149.          0.
-1.      5194.        109.          0.
 1980 JUL        4061.        243.        727.         -1.       5031.       1024.       4027.        154.         77.
-1.      5282.       -251.         51.
 1980 AUG        4061.        258.        697.         -1.       5016.       1141.       3907.        154.         77.
-1.      5279.       -263.        109.
 1980 SEP        4046.        255.        724.         -1.       5026.       1148.       3902.        149.          0.
-1.      5199.       -173.        127.
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________
 1980 Tot       49046.       3179.       8014.         -1.      60240.      14576.      44488.       1810.        374.
-1.     59587.        654.       1858.

                               Ground Water Budget  ACFT

                           From/To      From        From        Total               From River     Well
Reservoir     Reservoir
Year   Mo    Recharge      GWStorage    SoilM       Plan       Inflow     Divert       by Well    Depletion
Evaporation    Seepage

 Stream    Reservoir     To     SoilM     Total
Outflow     Change     SoilM    Change     Outflow     Delta   CU    Loss   Pumping    Salvage
======== ============ ======= ========== =========== ======== ===== ======= ========= =========
Ave   OCT        3978.        356.          0.         -1.       4333.       1922.       1752.        154.         77.
-1.      3905.        428.        500.
Ave   NOV        4046.        251.        356.         -1.       4653.       1115.       3381.        149.          0.
-1.      4644.          8.        111.
Ave   DEC        4061.        269.        607.         -1.       4937.       1229.       3742.        154.         77.
-1.      5202.       -265.        153.
Ave   JAN        4061.        288.        875.         -1.       5224.       1379.       3907.        154.          0.
-1.      5440.       -216.        228.
```

Ave	FEB	4017.	254.	807.	-1.	5078.	1199.	3893.	139.	69.	-1.	5300.	-222.	183.
Ave	MAR	4061.	280.	810.	-1.	5151.	1315.	3893.	154.	0.	-1.	5362.	-210.	197.
Ave	APR	4046.	273.	821.	-1.	5140.	1290.	3902.	149.	74.	-1.	5416.	-275.	199.
Ave	MAY	4311.	231.	807.	-1.	5348.	922.	4027.	154.	-77.	-1.	5027.	322.	0.
Ave	JUN	4296.	223.	783.	-1.	5303.	893.	4152.	149.	0.	-1.	5194.	109.	0.
Ave	JUL	4061.	243.	727.	-1.	5031.	1024.	4027.	154.	77.	-1.	5282.	-251.	51.
Ave	AUG	4061.	258.	697.	-1.	5016.	1141.	3907.	154.	77.	-1.	5279.	-263.	109.
Ave	SEP	4046.	255.	724.	-1.	5026.	1148.	3902.	149.	0.	-1.	5199.	-173.	127.
Ave	Tot	49046.	3179.	8014.	-1.	60240.	14576.	44488.	1810.	374.	-1.	61248.	-1008.	1858.

Note: (1) Recharge = Divert + Pumping - CU - Soil Moisture Change. Recharge and CU are for both surface and ground water. CU does not include reservoir evaporation.
(2) Other Inflows to ground water not modeled include natural stream loss, precipitation recharge, boundary inflow, etc.
(3) Other Outflows from ground water not modeled include natural stream gain, boundary outflow, CU by native species, etc.
(4) Delta is Total Inflow - Total Outflow but remember Other Inflows and Other Outflows are not included.
(5) Salvage is not part of the Ground Water Balance because it is a net change from native ET to agricultural CU.

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cdssnews@state.co.us
Last updated: 2012

Example 8

```
# Exhibit 8.1
# *.rsp; response file for Statemod Example 8
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                       Name
# ______________________________________     _____________________________
Control                                    = ex8.ctl
River_Network                              = ..\ex2\ex2.rin
StreamGage_Station                         = ..\ex1\ex1.ris
Stream_Base_Monthly                        = ..\ex1\ex1.rim
Diversion_Station                          = ..\ex1\ex1.dds
Diversion_Right                            = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                   = ..\ex1\ex1.ddm
Reservoir_Station                          = ..\ex2\ex2.res
Reservoir_Right                            = ..\ex2\ex2.rer
Reservoir_Target_Monthly                   = ..\ex2\ex2.tam
Evaporation_Monthly                        = ..\ex2\ex2.eva
Instreamflow_Station                       = ..\ex1\ex1.ifs
Instreamflow_Right                         = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly         = ..\ex1\ex1.ifa
Operational_Right                          = ..\ex3\ex3.opr
DelayTable_Monthly                         = ..\ex1\ex1.urm
OutputRequest                              = ..\ex1\ex1.out
#
Stream_Base_Daily                          = ex8.rid
Diversion_Demand_Daily                     = ex8.ddd
Instreamflow_Demand_Daily                  = ex8.ifd
Reservoir_Target_Daily                     = ex8.tad
DelayTable_Daily                           = ex8.urd

# Exhibit 8.2
# *.ctl;  Control file for StateMod Example 8
#
#
  STATEMOD
  StateMod Operating Rule Example - ex3.* data set
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;    ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;      ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       1     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       6     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       1     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       1     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       0     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       1     : isig    Number of significant digits behind decimal point in output files
```

```
# Exhibit 8.3
# *.rid;  Stream Flow Daily (cfs), total in ac-ft for StateMod Example 8
#
#       iy, im, cid, (q(i,j), j=1,32)
#          format(i5, i5, 1x, a12, 31f8.2, f8.0)
#
# iy  im cid           q(x,1)  q(x,2)  q(x,3)  q(x,4)  q(x,5)  q(x,6)  q(x,7)  q(x,8)  q(x,9) q(x,10) q(x,11) q(x,12)
q(x,13) q(x,14) q(x,15) q(x,16) q(x,17) q(x,18) q(x,19) q(x,20) q(x,21) q(x,22) q(x,23) q(x,24) q(x,25) q(x,26)
q(x,27) q(x,28) q(x,29) q(x,30) q(x,31)   Total
#___ ___x____________ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______
   10/1979  -      9/1980 CFS   WYR
1979  10 Dem_3          16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   1000.
1979  10 Dem_5          48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   3000.
1979  11 Dem_3          16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81
16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81
16.81   16.81   16.81    0.00   1000.
1979  11 Dem_5          50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42
50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42
50.42   50.42   50.42    0.00   3000.
1979  12 Dem_3          16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   1000.
1979  12 Dem_5          48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   3000.
1980   1 Dem_3          16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   1000.
1980   1 Dem_5          48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   3000.
1980   2 Dem_3          18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01
18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01
18.01    0.00    0.00    0.00   1000.
1980   2 Dem_5          54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02
54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02
54.02    0.00    0.00    0.00   3000.
1980   3 Dem_3          16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   1000.
1980   3 Dem_5          48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   3000.
1980   4 Dem_3          16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81
16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81
16.81   16.81   16.81    0.00   1000.
1980   4 Dem_5          50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42
50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42
50.42   50.42   50.42    0.00   3000.
1980   5 Dem_3          81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32
81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32   81.32
81.32   81.32   81.32   81.32   5000.
1980   5 Dem_5         243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95
243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95  243.95
243.95  243.95  243.95  243.95  15000.
1980   6 Dem_3          84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03
84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03   84.03
84.03   84.03   84.03    0.00   5000.
1980   6 Dem_5         252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08
252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08  252.08
252.08  252.08  252.08    0.00  15000.
1980   7 Dem_3          16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   1000.
1980   7 Dem_5          48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   3000.
1980   8 Dem_3          16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   1000.
1980   8 Dem_5          48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   3000.
1980   9 Dem_3          16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81
16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81
16.81   16.81   16.81    0.00   1000.
1980   9 Dem_5          50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42
50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42
50.42   50.42   50.42    0.00   3000.

# Exhibit 8.4
# *.ddd;  Demand Daily (cfs), total in ac-ft for StateMod Example 8
#
```

```
#       iy, im, cid, (q(i,j), j=1,32)
#          format(i5, i5, 1x, a12, 31f8.2, f8.0)
#
# iy  im cid           q(x,1)  q(x,2)  q(x,3)  q(x,4)  q(x,5)  q(x,6)  q(x,7)  q(x,8)  q(x,9) q(x,10) q(x,11) q(x,12)
q(x,13) q(x,14) q(x,15) q(x,16) q(x,17) q(x,18) q(x,19) q(x,20) q(x,21) q(x,22) q(x,23) q(x,24) q(x,25) q(x,26)
q(x,27) q(x,28) q(x,29) q(x,30) q(x,31)   Total
#___ ___x____________ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______
   10/1979  -     9/1981 CFS   WYR
1979  10 Dem_3           16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   1000.
1979  10 Dem_4            8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13
8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13
8.13    8.13    8.13    8.13    500.
1979  10 Dem_5            0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00      0.
1979  10 Dem_2           48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   3000.
1979  10 Dem_1           32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52
32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52
32.52   32.52   32.52   32.52   2000.
1979  11 Dem_3           16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81
16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81
16.81   16.81   16.81    0.00   1000.
1979  11 Dem_4            8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40
8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40    8.40
8.40    8.40    8.40    0.00    500.
1979  11 Dem_5            0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00      0.
1979  11 Dem_2           50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42
50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42
50.42   50.42   50.42    0.00   3000.
1979  11 Dem_1           33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62
33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62
33.62   33.62   33.62    0.00   2000.
1979  12 Dem_3           16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   1000.
1979  12 Dem_4            8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13
8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13
8.13    8.13    8.13    8.13    500.
1979  12 Dem_5            0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00      0.
1979  12 Dem_2           48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   3000.
1979  12 Dem_1           32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52
32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52
32.52   32.52   32.52   32.52   2000.
1980   1 Dem_3           16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   1000.
1980   1 Dem_4            8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13
8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13    8.13
8.13    8.13    8.13    8.13    500.
1980   1 Dem_5            0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00      0.
1980   1 Dem_2           48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79   48.79
48.79   48.79   48.79   48.79   3000.
1980   1 Dem_1           32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52
32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52   32.52
32.52   32.52   32.52   32.52   2000.
1980   2 Dem_3           18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01
18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01   18.01
18.01    0.00    0.00    0.00   1000.
1980   2 Dem_4            9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00
9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00    9.00
9.00    0.00    0.00    0.00   1000.
1980   2 Dem_5            0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00      0.
1980   2 Dem_2           54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02
54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02   54.02
54.02    0.00    0.00    0.00   3000.
1980   2 Dem_1           36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02
36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02   36.02
36.02    0.00    0.00    0.00   1000.
1980   3 Dem_3           16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26   16.26
16.26   16.26   16.26   16.26   1000.
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1980   3 Dem_4          8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13
8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13
8.13   8.13   8.13   8.13   500.
1980   3 Dem_5          0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.
1980   3 Dem_2          48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79
48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79
48.79  48.79  48.79  48.79  3000.
1980   3 Dem_1          32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52
32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52
32.52  32.52  32.52  32.52  2000.
1980   4 Dem_3          16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81
16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81  16.81
16.81  16.81  16.81  0.00   1000.
1980   4 Dem_4          8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40
8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40
8.40   8.40   8.40   0.00   500.
1980   4 Dem_5          0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.
1980   4 Dem_2          50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42
50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42
50.42  50.42  50.42  0.00   3000.
1980   4 Dem_1          33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62
33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62
33.62  33.62  33.62  0.00   2000.
1980   5 Dem_3          81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32
81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32  81.32
81.32  81.32  81.32  81.32  5000.
1980   5 Dem_4          8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13
8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13
8.13   8.13   8.13   8.13   500.
1980   5 Dem_5          0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.
1980   5 Dem_2          48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79
48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79
48.79  48.79  48.79  48.79  3000.
1980   5 Dem_1          32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52
32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52
32.52  32.52  32.52  32.52  2000.
1980   6 Dem_3          84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03
84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03  84.03
84.03  84.03  84.03  0.00   5000.
1980   6 Dem_4          8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40
8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40   8.40
8.40   8.40   8.40   0.00   500.
1980   6 Dem_5          0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.
1980   6 Dem_2          50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42
50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42  50.42
50.42  50.42  50.42  0.00   3000.
1980   6 Dem_1          33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62
33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62  33.62
33.62  33.62  33.62  0.00   2000.
1980   7 Dem_3          16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26
16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26
16.26  16.26  16.26  16.26  1000.
1980   7 Dem_4          8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13
8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13
8.13   8.13   8.13   8.13   500.
1980   7 Dem_5          0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.
1980   7 Dem_2          48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79
48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79
48.79  48.79  48.79  48.79  3000.
1980   7 Dem_1          32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52
32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52
32.52  32.52  32.52  32.52  2000.
1980   8 Dem_3          16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26
16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26  16.26
16.26  16.26  16.26  16.26  1000.
1980   8 Dem_4          8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13
8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13   8.13
8.13   8.13   8.13   8.13   500.
1980   8 Dem_5          0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00   0.00
0.00   0.00   0.00   0.00   0.
1980   8 Dem_2          48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79
48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79  48.79
48.79  48.79  48.79  48.79  3000.
1980   8 Dem_1          32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52
32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52  32.52
32.52  32.52  32.52  32.52  2000.
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1980   9 Dem_3          16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81
16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81   16.81
16.81   16.81   16.81    0.00   1000.
1980   9 Dem_4           0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00      0.
1980   9 Dem_5           0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00    0.00
0.00    0.00    0.00    0.00      0.
1980   9 Dem_2          50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42
50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42   50.42
50.42   50.42   50.42    0.00   3000.
1980   9 Dem_1          33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62
33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62   33.62
33.62   33.62   33.62    0.00   2000.

# Exhibit 8.5
# *.rid;  Instream Flows Daily (cfs) for StateMod Example 8
#
# *******************************************************
#
#     Card 1   Control
#     format:  (i4, i4, 1x, a12, 31f8.0)
#
#     Year     iryr:            Year
#     ID       cistat:          Station id
#     runoff(1-12):             Streamflow by month = virinp(im,np) for station np
#
# iy  im cid           q(x,1)  q(x,2)  q(x,3)  q(x,4)  q(x,5)  q(x,6)  q(x,7)  q(x,8)  q(x,9) q(x,10) q(x,11) q(x,12)
q(x,13) q(x,14) q(x,15) q(x,16) q(x,17) q(x,18) q(x,19) q(x,20) q(x,21) q(x,22) q(x,23) q(x,24) q(x,25) q(x,26)
q(x,27) q(x,28) q(x,29) q(x,30) q(x,31)   Total
#___ ___x____________ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______
   10/1979  -      9/1980 CFS   WYR
1979  10 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.
1979  11 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.
1979  12 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.
1980   1 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.
1980   2 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.
1980   3 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.
1980   4 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.
1980   5 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.
1980   6 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.
1980   7 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.
1980   8 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.
1980   9 Isf_1          65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50   65.50
65.50   65.50   65.50   65.50    504.16     4027.

# Exhibit 8.6
# *.tad;  Daily Targets (ac-ft) for StateMod Example 8
#
#       iy, im, cid, (q(i,j), j=1,32)
#       format(i4, i4, 1x, a12, 31f8.2, f8.0)
#
# iy  mo cid           q(x,1)  q(x,2)  q(x,3)  q(x,4)  q(x,5)  q(x,6)  q(x,7)  q(x,8)  q(x,9) q(x,10) q(x,11) q(x,12)
q(x,13) q(x,14) q(x,15) q(x,16) q(x,17) q(x,18) q(x,19) q(x,20) q(x,21) q(x,22) q(x,23) q(x,24) q(x,25) q(x,26)
q(x,27) q(x,28) q(x,29) q(x,30) q(x,31)   Total
#___ ___x____________ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______
   10/1979  -      9/1980 AF/M  WYR
1979  10 Res_1        99999.  99999. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.
```

```
1979  11 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.
1979  12 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.
1980   1 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.
1980   2 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.
1980   3 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.
1980   4 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.
1980   5 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.
1980   6 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.
1980   7 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.
1980   8 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.
1980   9 Res_1        100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000. 100000.
100000. 100000. 100000. 100000. 100000.    504.16     1000.

#
# ________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 15: 5:11
# Time Step:         Daily
#
# ________________________________________________________________________________

                              Water Budget  ACFT

               Stream                    From/To      From       From       Total                From River
Well    Reservoir  Reservoir    Stream   Reservoir            To       SoilM
Year   Mo      Inflow      Return      GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change       SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
 1979 OCT       4000.0      3494.6         0.0         0.0         0.0      7494.6      5957.0         0.0         0.0
0.0         0.0      1573.4       -35.8         0.0         0.0      7494.6         0.0      2378.5         0.0
0.0         0.0
 1979 NOV       4000.0      3596.1         0.0         0.0         0.0      7596.1      5997.8         0.0         0.0
0.0         0.0      1598.3         0.0         0.0         0.0      7596.1         0.0      2398.9         0.0
0.0         0.0
 1979 DEC       4000.0      3602.8         0.0         0.0         0.0      7602.8      6000.0         0.0         0.0
0.0         0.0      1602.8         0.0         0.0         0.0      7602.8         0.0      2400.0         0.0
0.0         0.0
 1980 JAN       4000.0      3600.0         0.0         0.0         0.0      7600.0      6000.0         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7600.0         0.0      2400.0         0.0
0.0         0.0
 1980 FEB       4000.0      3587.6         0.0         0.0         0.0      7587.6      5993.1         0.0         0.0
0.0         0.0      1594.5         0.0         0.0         0.0      7587.6         0.0      2396.5         0.0
0.0         0.0
 1980 MAR       4000.0      3609.0         0.0         0.0         0.0      7609.0      6000.0         0.0         0.0
25.2         0.0      1609.0       -25.2         0.0         0.0      7609.0        -0.1      2425.2         0.0
0.0         0.0
 1980 APR       4000.0      3596.1         0.0         0.0         0.0      7596.1      5997.8         0.0         0.0
327.3         0.0      1598.3      -327.3         0.0         0.0      7596.1         0.0      2726.2         0.0
0.0         0.0
 1980 MAY      20000.0      3848.8         0.0         0.0         0.0     23848.8      6500.0         0.0         0.0
299.0         0.0      5348.8     11700.9         0.0         0.0     23848.8         0.0      2949.0         0.0
0.0         0.0
 1980 JUN      20000.0      3847.1         0.0         0.0         0.0     23847.1      6500.0         0.0         0.0
802.4         0.0      5347.1     11197.5         0.0         0.0     23847.0         0.0      3452.4         0.0
0.0         0.0
 1980 JUL       4000.0      3607.0         0.0         0.0         0.0      7607.0      6000.0         0.0         0.0
481.3         0.0      4027.5     -2901.9         0.0         0.0      7607.0         0.0      2881.3         0.0
0.0         0.0
```

1980	AUG	4000.0	3600.0	0.0	0.0	0.0	7600.0	6000.0	0.0	0.0	375.1	0.0	4027.5	-2802.6	0.0	0.0	7600.0	0.0	2775.1	0.0	0.0	0.0
1980	SEP	4000.0	3596.1	0.0	0.0	0.0	7596.1	5997.8	0.0	0.0	304.4	0.0	3897.6	-2603.7	0.0	0.0	7596.1	0.0	2703.3	0.0	0.0	0.0
1980	Tot	80000.0	43585.1	0.0	0.0	0.0	123585.1	72943.6	0.0	0.0	2614.9	0.0	33824.6	14202.1	0.0	0.0	123585.2	0.0	31886.7	0.0	0.0	0.0

Water Budget ACFT

Year	Mo	Stream Inflow	Return	From/To GWStorage	From SoilM	From Plan	Total Inflow	Divert	From River by Well	Well Depletion	Reservoir Evaporation	Reservoir Seepage	Stream Outflow	Reservoir Change	To SoilM	SoilM Change	Total Outflow	Delta	CU	Loss	Pumping	Salvage
Ave	OCT	4000.0	3494.6	0.0	0.0	0.0	7494.6	5957.0	0.0	0.0	0.0	0.0	1573.4	-35.8	0.0	0.0	7494.6	0.0	2378.5	0.0	0.0	0.0
Ave	NOV	4000.0	3596.1	0.0	0.0	0.0	7596.1	5997.8	0.0	0.0	0.0	0.0	1598.3	0.0	0.0	0.0	7596.1	0.0	2398.9	0.0	0.0	0.0
Ave	DEC	4000.0	3602.8	0.0	0.0	0.0	7602.8	6000.0	0.0	0.0	0.0	0.0	1602.8	0.0	0.0	0.0	7602.8	0.0	2400.0	0.0	0.0	0.0
Ave	JAN	4000.0	3600.0	0.0	0.0	0.0	7600.0	6000.0	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7600.0	0.0	2400.0	0.0	0.0	0.0
Ave	FEB	4000.0	3587.6	0.0	0.0	0.0	7587.6	5993.1	0.0	0.0	0.0	0.0	1594.5	0.0	0.0	0.0	7587.6	0.0	2396.5	0.0	0.0	0.0
Ave	MAR	4000.0	3609.0	0.0	0.0	0.0	7609.0	6000.0	0.0	0.0	25.2	0.0	1609.0	-25.2	0.0	0.0	7609.0	-0.1	2425.2	0.0	0.0	0.0
Ave	APR	4000.0	3596.1	0.0	0.0	0.0	7596.1	5997.8	0.0	0.0	327.3	0.0	1598.3	-327.3	0.0	0.0	7596.1	0.0	2726.2	0.0	0.0	0.0
Ave	MAY	20000.0	3848.8	0.0	0.0	0.0	23848.8	6500.0	0.0	0.0	299.0	0.0	5348.8	11700.9	0.0	0.0	23848.8	0.0	2949.0	0.0	0.0	0.0
Ave	JUN	20000.0	3847.1	0.0	0.0	0.0	23847.1	6500.0	0.0	0.0	802.4	0.0	5347.1	11197.5	0.0	0.0	23847.0	0.0	3452.4	0.0	0.0	0.0
Ave	JUL	4000.0	3607.0	0.0	0.0	0.0	7607.0	6000.0	0.0	0.0	481.3	0.0	4027.5	-2901.9	0.0	0.0	7607.0	0.0	2881.3	0.0	0.0	0.0
Ave	AUG	4000.0	3600.0	0.0	0.0	0.0	7600.0	6000.0	0.0	0.0	375.1	0.0	4027.5	-2802.6	0.0	0.0	7600.0	0.0	2775.1	0.0	0.0	0.0
Ave	SEP	4000.0	3596.1	0.0	0.0	0.0	7596.1	5997.8	0.0	0.0	304.4	0.0	3897.6	-2603.7	0.0	0.0	7596.1	0.0	2703.3	0.0	0.0	0.0
Ave	Tot	80000.0	43585.1	0.0	0.0	0.0	123585.1	72943.6	0.0	0.0	2614.9	0.0	33824.6	14202.1	0.0	0.0	123585.2	0.0	31886.7	0.0	0.0	0.0
								0.0 (6)														
								72943.6														

Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency + max (Resevoir Evaporation (Evap), 0.0).
(2) Loss is not part of the Stream Water Balance. It is the portion of a diversion, well pumping and reservoir seepage that does not return to the stream
(3) Pumping is not part of the Stream Balance. Its impact on the stream is included in the From River by Well and Well Depletion columns
(4) Salvage is not part of the Stream Water Balance. It is the portion of well pumping that does not impact the stream
(5) From Plan is water from a reuse plan.
(6) Divert does not include diversions by an instream flow or a T&C plan. Also to avoid double accounting with reservoir storage it has reduced by:

1	0. af/yr	for Diverted to Storage.
2	0. af/yr	for a Diversion Carrier.
3	0. af/yr	for a Reservior Carrier.
4	0. af/yr	for a Plan Carrier.
	0. af/yr	Total

```
#
# ________________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 15: 5: 7
# Time Step:         Daily
#
# ________________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =        10
#
#
________________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
           operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID               Type         Admin #  On/Off  Str ID #1    Str ID #2           Amount Right Name
Str Name #1               Str Name #2
#    (1) (2)               (3)             (4)     (5)  (6)          (7)                    (8) (9)
(10)                       (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

       1 Dem_1_WR_1          3        2.00000       1  Dem_1        -1               100.000 c M&I Demand _1
Municipal Demand _1
       2 Dem_2_WR_1          3        6.00000       1  Dem_2        -1                60.000 c Irrigation Demand _2
Irrigation Demand _2
       3 Dem_3_WR_1          3        7.00000       1  Dem_3        -1               100.000 c Irrigation Demand _3
Irrigation Demand _3
       4 ISF_WR_1            1        9.00000       1  ISF          -1                65.500 c Instream Flow 1
Instream Demand

       5 Opr_2             102        9.00000       1  Dem_2        -1                -1.000 x Opr_Res_1_to_Dem_2
Irrigation Demand _2
       6 Opr_3             101        9.00000       1  ISF          -1                -1.000 x Opr_Res_1_to_ISF
Instream Demand

       7 Dem_4_WR_1          3       10.00000       1  Dem_4        -1               100.000 c Irrigation Demand _4
Irrigation Demand _4

       8 Opr_1             109       10.00000       1  -1           -1                -1.000 x Opr_Res_1_to_Target

       9 Res_1_WR_1          2       15.00000       1  Res_1        -1            100000.000 a Reservoir_1
Reservoir_1
      10 Dem_5_WR_1          3       15.00000       1  Dem_5        -1               100.000 c Irrigation Demand _5
Irrigation Demand _5

#
# ________________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 15: 4:56
# Time Step:         Daily
```

```
#
# ______________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                         Demand              From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3        1979  OCT  1000.0   500.0   953.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   953.4    46.6    23.3   476.7     0.0   476.7     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
953.4     0.0    46.6     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1979  NOV  1000.0   500.0   997.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   997.8     2.2     1.1   498.9     0.0   498.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
997.8     0.0     2.2     0.0 Dem_1            100.000
Dem_3       Dem_3        1979  DEC  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  JAN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  FEB  1000.0   500.0   993.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   993.1     6.9     3.5   496.5     0.0   496.5     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
993.1     0.0     6.9     0.0 Dem_1            100.000
Dem_3       Dem_3        1980  MAR  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  APR  1000.0   500.0   997.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   997.8     2.2     1.1   498.9     0.0   498.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
997.8     0.0     2.2     0.0 Dem_1            100.000
Dem_3       Dem_3        1980  MAY  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1321.3 NA                -1.000
Dem_3       Dem_3        1980  JUN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1449.5 NA                -1.000
Dem_3       Dem_3        1980  JUL  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  AUG  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  SEP  1000.0   500.0   997.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   997.8     2.2     1.1   498.9     0.0   498.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
997.8     0.0     2.2     0.0 Dem_1            100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_3       Dem_3        1980  TOT 12000.0  6000.0 11940.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 11940.0    60.0    30.0  5970.0     0.0  5970.0     0.0     0.0 20000.0     0.0     0.0     0.0 20000.0
11940.0     0.0  8060.0  2770.8 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    STRUCTURE ID (0 = total)  : Dem_4               2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4        Exist. Diver. 4
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    RIVER LOCATION - TO       : Dem_4        Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand            From River By                 From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_4       Dem_4       1979  OCT   500.0   250.0     3.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     3.6   496.4   248.2     1.8     0.0     1.8     0.0    46.6     0.0   468.6     0.0     0.0   515.2
3.6     0.0   511.6     0.0 ISF             100.000
Dem_4       Dem_4       1979  NOV   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     2.2     0.0   498.7     0.0     0.0   500.8
0.0     0.0   500.8     0.0 Dem_1           100.000
Dem_4       Dem_4       1979  DEC   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.3     0.0     0.0   500.3
0.0     0.0   500.3     0.0 ISF             100.000
Dem_4       Dem_4       1980  JAN   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  FEB   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     6.9     0.0   495.7     0.0     0.0   502.6
0.0     0.0   502.6     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  MAR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.9     0.0     0.0   500.9
0.0     0.0   500.9     0.0 ISF             100.000
Dem_4       Dem_4       1980  APR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     2.2     0.0   498.7     0.0     0.0   500.8
0.0     0.0   500.8     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  MAY   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.3     0.0     0.0  4500.3
500.0     0.0  4000.3  1321.3 NA                 -1.000
Dem_4       Dem_4       1980  JUN   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   499.7     0.0     0.0  4499.7
500.0     0.0  3999.7  1449.5 NA                 -1.000
Dem_4       Dem_4       1980  JUL   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.3     0.0     0.0   500.3
0.0     0.0   500.3     0.0 ISF             100.000
Dem_4       Dem_4       1980  AUG   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     2.2     0.0   498.7     0.0     0.0   500.8
0.0     0.0   500.8     0.0 ISF             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_4       Dem_4       1980  TOT  5500.0  2750.0  1003.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1003.6  4496.4  2248.2   501.8     0.0   501.8     0.0  8060.0     0.0  5961.7     0.0     0.0 14021.6
1003.6     0.0 13018.1  2770.8 NA                 -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    STRUCTURE ID (0 = total)  : Dem_5             -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.
```

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Shortage                 Water Use
                                        Demand              From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
====================================== ==========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5        1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2              60.000
Dem_5       Dem_5        1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2              60.000
Dem_5       Dem_5        1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2              60.000
Dem_5       Dem_5        1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2              60.000
Dem_5       Dem_5        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2              60.000
Dem_5       Dem_5        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2              60.000
Dem_5       Dem_5        1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2              60.000
Dem_5       Dem_5        1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Dem_2              60.000
Dem_5       Dem_5        1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Dem_2              60.000
Dem_5       Dem_5        1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF               100.000
Dem_5       Dem_5        1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF               100.000
Dem_5       Dem_5        1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF               100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_5       Dem_5        1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0     0.0 NA                 -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    STRUCTURE ID (0 = total)  : Res_1           7501
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Reservoir_1
    RIVER LOCATION - FROM     : Res_1       Exist. Reservoir
    RIVER LOCATION - TO       : Res_1       Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.


Shortage                 Water Use
                                        Demand              From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
====================================== ==========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
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Res_1       Res_1       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
-35.8     0.0  3035.8     0.0 Dem_2            60.000
Res_1       Res_1       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 Dem_2            60.000
Res_1       Res_1       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2420.5     0.0  5420.5     0.0 ISF              100.000
Res_1       Res_1       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2427.5     0.0  5427.5     0.0 ISF              100.000
Res_1       Res_1       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2299.3     0.0  5299.3     0.0 ISF              100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Res_1       Res_1       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
16816.9     0.0 43183.1     0.0 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2        Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2        Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============= ==============================    From    ====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU    SoilM   Return    Loss    Inflow

            Station In/Out                                 Station Balance
==================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2       1979  OCT  3000.0  1500.0  2989.2    10.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3035.8     0.0     0.0     0.0     0.0  3035.8
3000.0     0.0    35.8     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1979  NOV  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1979  DEC  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  JAN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
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Dem_2       Dem_2       1980  FEB  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  MAR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  APR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  MAY  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA               -1.000
Dem_2       Dem_2       1980  JUN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA               -1.000
Dem_2       Dem_2       1980  JUL  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5420.5     0.0     0.0     0.0     0.0  5420.5
3000.0     0.0  2420.5     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  AUG  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5427.5     0.0     0.0     0.0     0.0  5427.5
3000.0     0.0  2427.5     0.0 Hgate_Limit      -1.000
Dem_2       Dem_2       1980  SEP  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5299.3     0.0     0.0     0.0     0.0  5299.3
3000.0     0.0  2299.3     0.0 Hgate_Limit      -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_2       Dem_2       1980  TOT 36000.0 18000.0 35989.2    10.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 36000.0     0.0     0.0 18000.0     0.0 18000.0     0.0 43183.1     0.0     0.0     0.0     0.0 43183.1
36000.0     0.0  7183.1     0.0 NA               -1.000


    Gage  Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    RIVER LOCATION - FROM     : Riv_50       Confluence
    RIVER LOCATION - TO       : Riv_50       Confluence



Shortage                 Water Use
                                        Demand               From River By                   From Carrier By
Carried                 ============== ===============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU            To    Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                         Station Balance
===================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
NA          Riv_50      1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   547.4     0.0     1.8     0.0     0.0   549.2
0.0     0.0   549.2     0.0 NA               -1.000
NA          Riv_50      1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.8     0.0     0.0     0.0     0.0   500.8
0.0     0.0   500.8     0.0 NA               -1.000
NA          Riv_50      1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.3     0.0     0.0     0.0     0.0   500.3
0.0     0.0   500.3     0.0 NA               -1.000
NA          Riv_50      1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA               -1.000
NA          Riv_50      1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   502.6     0.0     0.0     0.0     0.0   502.6
0.0     0.0   502.6     0.0 NA               -1.000
NA          Riv_50      1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.9     0.0     0.0     0.0     0.0   500.9
0.0     0.0   500.9     0.0 NA               -1.000
NA          Riv_50      1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.8     0.0     0.0     0.0     0.0   500.8
0.0     0.0   500.8     0.0 NA               -1.000
NA          Riv_50      1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4000.3     0.0   246.0     0.0     0.0  4246.2
0.0     0.0  4246.2  1321.3 NA               -1.000
NA          Riv_50      1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3999.7     0.0   249.9     0.0     0.0  4249.6
0.0     0.0  4249.6  1449.5 NA               -1.000
NA          Riv_50      1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2920.8     0.0     4.2     0.0     0.0  2925.0
0.0     0.0  2925.0     0.0 NA               -1.000
NA          Riv_50      1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2927.5     0.0     0.0     0.0     0.0  2927.5
0.0     0.0  2927.5     0.0 NA               -1.000
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NA          Riv_50       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2800.1     0.0     0.0     0.0     0.0  2800.1
0.0     0.0  2800.1     0.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
NA          Riv_50       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 20201.1     0.0   501.8     0.0     0.0 20702.9
0.0     0.0 20702.9  2770.8 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    STRUCTURE ID (0 = total)  : Dem_1              5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                Water Use
                                          Demand              From River By                  From Carrier By
Carried                ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
===================================== =========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   549.2     0.0  1475.8     0.0     0.0  2025.0
2000.0     0.0    25.0     0.0 NA                -1.000
Dem_1       Dem_1        1979  NOV  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.8     0.0  1499.2     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1        1979  DEC  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.3     0.0  1500.8     0.0     0.0  2001.1
2000.0     0.0     1.1     0.0 NA                -1.000
Dem_1       Dem_1        1980  JAN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1        1980  FEB  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   502.6     0.0  1497.4     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1        1980  MAR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.9     0.0  1502.6     0.0     0.0  2003.5
2000.0     0.0     3.5     0.0 NA                -1.000
Dem_1       Dem_1        1980  APR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.8     0.0  1499.2     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                -1.000
Dem_1       Dem_1        1980  MAY  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4246.2     0.0  1500.8     0.0     0.0  5747.0
2000.0     0.0  3747.0  1321.3 NA                -1.000
Dem_1       Dem_1        1980  JUN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4249.6     0.0  1499.2     0.0     0.0  5748.8
2000.0     0.0  3748.8  1449.5 NA                -1.000
Dem_1       Dem_1        1980  JUL  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2925.0     0.0  1500.8     0.0     0.0  4425.8
2000.0     0.0  2425.8     0.0 NA                -1.000
Dem_1       Dem_1        1980  AUG  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2927.5     0.0  1500.0     0.0     0.0  4427.5
2000.0     0.0  2427.5     0.0 NA                -1.000
Dem_1       Dem_1        1980  SEP  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2800.1     0.0  1499.2     0.0     0.0  4299.3
2000.0     0.0  2299.3     0.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_1       Dem_1        1980  TOT 24000.0  4800.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 24000.0     0.0     0.0  4800.0     0.0 19200.0     0.0 20702.9     0.0 17975.0     0.0     0.0 38677.9
24000.0     0.0 14677.9  2770.8 NA                -1.000


   Diversion Summary  ACFT
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     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
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    STRUCTURE ID (0 = total)  : ISF              5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF          Top Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand               From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID          Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
==================================== =============================================
Reach   Return Well    From/To River   River  River   River    Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF         1979  OCT  4027.5     0.0  1548.4    25.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1573.4  2454.1     0.0     0.0     0.0  1573.4     0.0    25.0     0.0  1548.4     0.0     0.0  1573.4
1573.4     0.0  1573.4     0.0 Hgate_Limit       -1.000
ISF         ISF         1979  NOV  3897.6     0.0  1598.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1598.3  2299.3     0.0     0.0     0.0  1598.3     0.0     0.0     0.0  1598.3     0.0     0.0  1598.3
1598.3     0.0  1598.3     0.0 Hgate_Limit       -1.000
ISF         ISF         1979  DEC  4027.5     0.0  1602.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1602.8  2424.7     0.0     0.0     0.0  1602.8     0.0     1.1     0.0  1601.7     0.0     0.0  1602.8
1602.8     0.0  1602.8     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  JAN  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  FEB  3637.7     0.0  1594.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1594.5  2043.3     0.0     0.0     0.0  1594.5     0.0     0.0     0.0  1594.5     0.0     0.0  1594.5
1594.5     0.0  1594.5     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  MAR  4027.5     0.0  1609.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1609.0  2418.5     0.0     0.0     0.0  1609.0     0.0     3.5     0.0  1605.5     0.0     0.0  1609.0
1609.0     0.0  1609.0     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  APR  3897.6     0.0  1598.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1598.3  2299.3     0.0     0.0     0.0  1598.3     0.0     0.0     0.0  1598.3     0.0     0.0  1598.3
1598.3     0.0  1598.3     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  MAY  4027.5     0.0  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  3747.0     0.0  1601.7     0.0     0.0  5348.8
4027.5     0.0  5348.8  1321.3 NA                -1.000
ISF         ISF         1980  JUN  3897.6     0.0  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0  3748.8     0.0  1598.3     0.0     0.0  5347.1
3897.6     0.0  5347.1  1449.5 NA                -1.000
ISF         ISF         1980  JUL  4027.5     0.0  1607.0  2420.5     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  2425.8     0.0  1601.7     0.0     0.0  4027.5
4027.5     0.0  4027.5     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  AUG  4027.5     0.0  1600.0  2427.5     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  2427.5     0.0  1600.0     0.0     0.0  4027.5
4027.5     0.0  4027.5     0.0 Hgate_Limit       -1.000
ISF         ISF         1980  SEP  3897.6     0.0  1598.3  2299.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0  2299.3     0.0  1598.3     0.0     0.0  3897.6
3897.6     0.0  3897.6     0.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
ISF         ISF         1980  TOT 47420.5     0.0 23881.5  7172.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 31053.8 16366.7     0.0     0.0     0.0 31053.8     0.0 14677.9     0.0 19146.7     0.0     0.0 33824.6
31053.8     0.0 33824.6  2770.8 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   9

    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Bottom Instream Flow
    RIVER LOCATION - FROM     : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


Shortage                 Water Use
```

```
                                        Demand            From River By                 From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                Station Balance
==================================== ========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  1573.4     0.0     0.0     0.0     0.0  1573.4
0.0     0.0  1573.4     0.0 NA                -1.000
Baseflow    ISF.01       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  1598.3     0.0     0.0     0.0     0.0  1598.3
0.0     0.0  1598.3     0.0 NA                -1.000
Baseflow    ISF.01       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  1602.8     0.0     0.0     0.0     0.0  1602.8
0.0     0.0  1602.8     0.0 NA                -1.000
Baseflow    ISF.01       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  1594.5     0.0     0.0     0.0     0.0  1594.5
0.0     0.0  1594.5     0.0 NA                -1.000
Baseflow    ISF.01       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  1609.0     0.0     0.0     0.0     0.0  1609.0
0.0     0.0  1609.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  1598.3     0.0     0.0     0.0     0.0  1598.3
0.0     0.0  1598.3     0.0 NA                -1.000
Baseflow    ISF.01       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  5348.8     0.0     0.0     0.0     0.0  5348.8
0.0     0.0  5348.8  1321.3 NA                -1.000
Baseflow    ISF.01       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  5347.1     0.0     0.0     0.0     0.0  5347.1
0.0     0.0  5347.1  1449.5 NA                -1.000
Baseflow    ISF.01       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5
0.0     0.0  4027.5     0.0 NA                -1.000
Baseflow    ISF.01       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5
0.0     0.0  4027.5     0.0 NA                -1.000
Baseflow    ISF.01       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6
0.0     0.0  3897.6     0.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Baseflow    ISF.01       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0 33824.6     0.0     0.0     0.0     0.0 33824.6
0.0     0.0 33824.6  2770.8 NA                -1.000

#
# ________________________________________________________________________________
# *.xdy       Daily Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 15: 4:56
# Time Step:         Daily
#
# ________________________________________________________________________________

    Diversion Summary  ACFT
     ST  St426426426Dem_426426426426Irrigation Demand _3    Dem_Exist. Diver. 3/Inflow  Dem_Exis
   t. Diver. 3/Inflow

    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage              Water Use                        Station In/Out                     Station Balance
                                                              From River By                      From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU ______________________________    From _______________________
or    From   Total   Total      CU            To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
```

```
Structure   River                      Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID         ID          Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                      ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______

_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3        1979  OCT   1    32.3    16.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    32.3    16.1     0.0     0.0     0.0     0.0     0.0    32.3     0.0     0.0     0.0    32.3
0.0     0.0    32.3     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT   2    32.3    16.1    22.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    22.7     9.6     4.8    11.4     0.0    11.4     0.0     0.0    32.3     0.0     0.0     0.0    32.3
22.7     0.0     9.6     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT   3    32.3    16.1    29.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    29.1     3.2     1.6    14.5     0.0    14.5     0.0     0.0    32.3     0.0     0.0     0.0    32.3
29.1     0.0     3.2     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT   4    32.3    16.1    31.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    31.2     1.1     0.5    15.6     0.0    15.6     0.0     0.0    32.3     0.0     0.0     0.0    32.3
31.2     0.0     1.1     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT   5    32.3    16.1    31.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    31.9     0.4     0.2    16.0     0.0    16.0     0.0     0.0    32.3     0.0     0.0     0.0    32.3
31.9     0.0     0.4     0.0 Dem_1        100.000

Dem_3       Dem_3        1979  OCT   6    32.3    16.1    32.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.1     0.1     0.1    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.1     0.0     0.1     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT   7    32.3    16.1    32.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.2     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.2     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT   8    32.3    16.1    32.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.2     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.2     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT   9    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT  10    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3        1979  OCT  11    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT  12    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT  13    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT  14    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1979  OCT  15    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3        1979  OCT  16    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1979  OCT  17    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1979  OCT  18    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1979  OCT  19    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1979  OCT  20    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3        1979  OCT  21    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1979  OCT  22    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1979  OCT  23    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1979  OCT  24    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_3       Dem_3       1979  OCT  25    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1979  OCT  26    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  OCT  27    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  OCT  28    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  OCT  29    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  OCT  30    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1979  OCT  31    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3       1980  TOT  -1  1000.0   500.0   953.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   953.4    46.6    23.3   476.7     0.0   476.7     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
953.4     0.0    46.6     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________    From ________________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day       NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3       1979  NOV   1    33.3    16.7    31.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    31.9     1.4     0.7    15.9     0.0    15.9     0.0     0.0    33.3     0.0     0.0     0.0    33.3
31.9     0.0     1.4     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV   2    33.3    16.7    32.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.9     0.5     0.2    16.4     0.0    16.4     0.0     0.0    33.3     0.0     0.0     0.0    33.3
32.9     0.0     0.5     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV   3    33.3    16.7    33.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.2     0.2     0.1    16.6     0.0    16.6     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.2     0.0     0.2     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV   4    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.1     0.0    16.6     0.0    16.6     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.1     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV   5    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1979  NOV   6    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV   7    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV   8    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV   9    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  10    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1979  NOV  11    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  12    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
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Dem_3       Dem_3       1979  NOV  13    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  14    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  15    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1979  NOV  16    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  17    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  18    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  19    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  20    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1979  NOV  21    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  22    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  23    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  24    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  25    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1979  NOV  26    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  27    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  28    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  29    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1979  NOV  30    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_3       Dem_3       1980  TOT  -1  1000.0   500.0   997.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   997.8     2.2     1.1   498.9     0.0   498.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
997.8     0.0     2.2     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                     Station Balance
                                                                From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                             Total      CU _______________________________    From _______________________
or    From   Total   Total      CU             To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control        Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                              ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_3       Dem_3       1979  DEC   1    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_3       Dem_3       1979  DEC   2    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC   3    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC   4    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC   5    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1979  DEC   6    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC   7    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC   8    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC   9    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  10    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1979  DEC  11    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  12    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  13    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  14    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  15    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1979  DEC  16    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  17    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  18    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  19    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  20    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1979  DEC  21    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  22    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  23    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  24    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  25    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1979  DEC  26    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  27    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  28    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1979  DEC  29    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_3       Dem_3       1979  DEC  30    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1979  DEC  31    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3       1980  TOT  -1  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                       Station Balance
                                                                 From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                             Total      CU _______________________________     From _______________________
or    From   Total   Total      CU             To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3       1980  JAN   1    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN   2    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN   3    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN   4    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN   5    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JAN   6    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN   7    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN   8    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN   9    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  10    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JAN  11    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  12    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  13    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  14    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  15    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JAN  16    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  17    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_3       Dem_3       1980  JAN  18    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  19    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  20    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JAN  21    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  22    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  23    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  24    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  25    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JAN  26    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  27    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  28    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  29    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JAN  30    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JAN  31    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3       1980  TOT  -1  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                        Station Balance
                                                                From River By                         From Carrier By
Carried                ______________ _______________________________ _______________________________________
_______________________________
                                         Total      CU ______________________________    From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure    River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA               NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3       1980  FEB   1    35.7    17.9    31.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    31.1     4.6     2.3    15.6     0.0    15.6     0.0     0.0    35.7     0.0     0.0     0.0    35.7
31.1     0.0     4.6     0.0 Dem_1         100.000
Dem_3       Dem_3       1980  FEB   2    35.7    17.9    34.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    34.2     1.5     0.8    17.1     0.0    17.1     0.0     0.0    35.7     0.0     0.0     0.0    35.7
34.2     0.0     1.5     0.0 Dem_1         100.000
Dem_3       Dem_3       1980  FEB   3    35.7    17.9    35.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.2     0.5     0.3    17.6     0.0    17.6     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.2     0.0     0.5     0.0 Dem_1         100.000
Dem_3       Dem_3       1980  FEB   4    35.7    17.9    35.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.5     0.2     0.1    17.8     0.0    17.8     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.5     0.0     0.2     0.0 Dem_1         100.000
Dem_3       Dem_3       1980  FEB   5    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.1     0.0    17.8     0.0    17.8     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.1     0.0 Dem_1         100.000
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Dem_3       Dem_3       1980  FEB   6    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.8     0.0    17.8     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB   7    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB   8    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB   9    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  10    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1980  FEB  11    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  12    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  13    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  14    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  15    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1980  FEB  16    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  17    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  18    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  19    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  20    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1980  FEB  21    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  22    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  23    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  24    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  25    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1980  FEB  26    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  27    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  FEB  28    35.7    17.9    35.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    35.7     0.0     0.0    17.9     0.0    17.9     0.0     0.0    35.7     0.0     0.0     0.0    35.7
35.7     0.0     0.0     0.0 Dem_1        100.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_3       Dem_3       1980  TOT  -1  1000.0   500.0   993.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   993.1     6.9     3.5   496.5     0.0   496.5     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
993.1     0.0     6.9     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                       Station Balance
                                                                 From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                       Total      CU _______________________________    From _______________________
or    From   Total   Total      CU          To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
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Structure   River                      Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short     CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
____________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3        1980  MAR   1    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR   2    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR   3    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR   4    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR   5    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3        1980  MAR   6    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR   7    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR   8    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR   9    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  10    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3        1980  MAR  11    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  12    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  13    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  14    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  15    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3        1980  MAR  16    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  17    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  18    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  19    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  20    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3        1980  MAR  21    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  22    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  23    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  MAR  24    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_3       Dem_3       1980  MAR  25    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  MAR  26    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  MAR  27    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  MAR  28    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  MAR  29    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  MAR  30    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  MAR  31    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3       1980  TOT  -1  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 NA            -1.000


Shortage               Water Use                         Station In/Out                      Station Balance
                                                                From River By                          From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                              Total      CU _______________________________    From _______________________
or    From   Total   Total      CU               To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                            ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3       1980  APR   1    33.3    16.7    31.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    31.9     1.4     0.7    15.9     0.0    15.9     0.0     0.0    33.3     0.0     0.0     0.0    33.3
31.9     0.0     1.4     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  APR   2    33.3    16.7    32.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.9     0.5     0.2    16.4     0.0    16.4     0.0     0.0    33.3     0.0     0.0     0.0    33.3
32.9     0.0     0.5     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  APR   3    33.3    16.7    33.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.2     0.2     0.1    16.6     0.0    16.6     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.2     0.0     0.2     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  APR   4    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.1     0.0    16.6     0.0    16.6     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.1     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  APR   5    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1980  APR   6    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  APR   7    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  APR   8    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  APR   9    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  APR  10    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1980  APR  11    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  APR  12    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
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Dem_3       Dem_3        1980  APR  13    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  14    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  15    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3        1980  APR  16    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  17    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  18    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  19    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  20    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3        1980  APR  21    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  22    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  23    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  24    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  25    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3        1980  APR  26    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  27    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  28    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  29    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3        1980  APR  30    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_3       Dem_3        1980  TOT  -1  1000.0   500.0   997.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   997.8     2.2     1.1   498.9     0.0   498.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
997.8     0.0     2.2     0.0 NA              -1.000


Shortage                Water Use                         Station In/Out                       Station Balance
                                                                 From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________     From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control         Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_3       Dem_3        1980  MAY   1    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0   161.3     0.0     0.0     0.0   161.3
32.3     0.0   129.0    40.7 NA              -1.000
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Dem_3 Dem_3 1980 MAY 2 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 43.2 NA -1.000
Dem_3 Dem_3 1980 MAY 3 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.8 NA -1.000
Dem_3 Dem_3 1980 MAY 4 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 5 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000

Dem_3 Dem_3 1980 MAY 6 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 7 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 8 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 9 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 10 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000

Dem_3 Dem_3 1980 MAY 11 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 12 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 13 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 14 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 15 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000

Dem_3 Dem_3 1980 MAY 16 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 17 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 18 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 19 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 20 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000

Dem_3 Dem_3 1980 MAY 21 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 22 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 23 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 24 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 25 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000

Dem_3 Dem_3 1980 MAY 26 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 27 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 28 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000
Dem_3 Dem_3 1980 MAY 29 32.3 16.1 32.3 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 32.3 0.0 0.0 16.1 0.0 16.1 0.0 0.0 161.3 0.0 0.0 0.0 161.3
32.3 0.0 129.0 42.7 NA -1.000

```
Dem_3       Dem_3       1980  MAY  30    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0   161.3     0.0     0.0     0.0   161.3
32.3     0.0   129.0    42.7 NA           -1.000

Dem_3       Dem_3       1980  MAY  31    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0   161.3     0.0     0.0     0.0   161.3
32.3     0.0   129.0    42.7 NA           -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_3       Dem_3       1980  TOT  -1  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1321.3 NA           -1.000


Shortage                Water Use                         Station In/Out                    Station Balance
                                                                 From River By                     From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________     From _______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control      Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln     Loss    Well Priorty Sto_Exc     Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow     Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_3       Dem_3       1980  JUN   1    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    46.2 NA           -1.000
Dem_3       Dem_3       1980  JUN   2    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    47.9 NA           -1.000
Dem_3       Dem_3       1980  JUN   3    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.2 NA           -1.000
Dem_3       Dem_3       1980  JUN   4    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN   5    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000

Dem_3       Dem_3       1980  JUN   6    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN   7    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN   8    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN   9    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  10    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000

Dem_3       Dem_3       1980  JUN  11    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  12    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  13    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  14    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  15    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000

Dem_3       Dem_3       1980  JUN  16    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  17    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
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Dem_3       Dem_3       1980  JUN  18    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  19    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  20    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000

Dem_3       Dem_3       1980  JUN  21    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  22    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  23    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  24    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  25    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000

Dem_3       Dem_3       1980  JUN  26    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  27    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  28    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  29    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
Dem_3       Dem_3       1980  JUN  30    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0   166.7     0.0     0.0     0.0   166.7
33.3     0.0   133.3    48.4 NA           -1.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_3       Dem_3       1980  TOT  -1  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1449.5 NA           -1.000


Shortage                Water Use                         Station In/Out                     Station Balance
                                                                 From River By                        From Carrier By
Carried                ________________ _______________________________ ___________________________________
_____________________________
                                         Total      CU ______________________________    From _____________________
or    From   Total   Total     CU             To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_3       Dem_3       1980  JUL   1    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL   2    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL   3    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL   4    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL   5    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JUL   6    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_3       Dem_3       1980  JUL   7    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL   8    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL   9    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  10    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JUL  11    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  12    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  13    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  14    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  15    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JUL  16    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  17    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  18    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  19    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  20    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JUL  21    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  22    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  23    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  24    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  25    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JUL  26    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  27    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  28    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  29    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  JUL  30    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  JUL  31    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3       1980  TOT  -1  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 NA            -1.000
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Shortage              Water Use                          Station In/Out                          Station Balance
                                                                From River By                            From Carrier By
Carried              ________________ _______________________________ _______________________________________
_______________________________
                                                  Total      CU ______________________________    From _______________________
or    From   Total   Total     CU              To   Total        Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short     CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA      (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA           NA
                                                ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3        1980  AUG   1    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG   2    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG   3    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG   4    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG   5    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3        1980  AUG   6    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG   7    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG   8    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG   9    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG  10    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3        1980  AUG  11    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG  12    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG  13    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG  14    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG  15    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3        1980  AUG  16    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG  17    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG  18    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG  19    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3        1980  AUG  20    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3        1980  AUG  21    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_3       Dem_3       1980  AUG  22    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  AUG  23    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  AUG  24    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  AUG  25    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  AUG  26    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  AUG  27    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  AUG  28    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  AUG  29    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_3       Dem_3       1980  AUG  30    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_3       Dem_3       1980  AUG  31    32.3    16.1    32.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.3     0.0     0.0    16.1     0.0    16.1     0.0     0.0    32.3     0.0     0.0     0.0    32.3
32.3     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3       1980  TOT  -1  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                      Station Balance
                                                                 From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
________________________________
                                                  Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                 NA
                                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_3       Dem_3       1980  SEP   1    33.3    16.7    31.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    31.9     1.4     0.7    15.9     0.0    15.9     0.0     0.0    33.3     0.0     0.0     0.0    33.3
31.9     0.0     1.4     0.0 Dem_1       100.000
Dem_3       Dem_3       1980  SEP   2    33.3    16.7    32.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    32.9     0.5     0.2    16.4     0.0    16.4     0.0     0.0    33.3     0.0     0.0     0.0    33.3
32.9     0.0     0.5     0.0 Dem_1       100.000
Dem_3       Dem_3       1980  SEP   3    33.3    16.7    33.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.2     0.2     0.1    16.6     0.0    16.6     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.2     0.0     0.2     0.0 Dem_1       100.000
Dem_3       Dem_3       1980  SEP   4    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.1     0.0    16.6     0.0    16.6     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.1     0.0 Dem_1       100.000
Dem_3       Dem_3       1980  SEP   5    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1       100.000

Dem_3       Dem_3       1980  SEP   6    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1       100.000
Dem_3       Dem_3       1980  SEP   7    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1       100.000
Dem_3       Dem_3       1980  SEP   8    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1       100.000
Dem_3       Dem_3       1980  SEP   9    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1       100.000
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Dem_3       Dem_3       1980  SEP  10    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1980  SEP  11    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  12    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  13    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  14    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  15    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1980  SEP  16    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  17    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  18    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  19    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  20    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1980  SEP  21    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  22    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  23    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  24    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  25    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000

Dem_3       Dem_3       1980  SEP  26    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  27    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  28    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  29    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
Dem_3       Dem_3       1980  SEP  30    33.3    16.7    33.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    33.3     0.0     0.0    16.7     0.0    16.7     0.0     0.0    33.3     0.0     0.0     0.0    33.3
33.3     0.0     0.0     0.0 Dem_1        100.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______

Dem_3       Dem_3       1980  TOT  -1  1000.0   500.0   997.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   997.8     2.2     1.1   498.9     0.0   498.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
997.8     0.0     2.2     0.0 NA            -1.000


    Diversion Summary  ACFT
     ST  St443443443Dem_443443443443Irrigation Demand _4    Dem_Exist. Diver. 4         Dem_Exis
   t. Diver. 4

    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                Water Use                         Station In/Out                       Station Balance
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                                                                  From River By                  From Carrier By
Carried                 ________________ _______________________________ _______________________________________
________________________________
                                          Total      CU ______________________________      From ______________________
or    From   Total   Total      CU                  To   Total          Upstrm   Reach  Return    Well From/To   River
River  River   River   Avail Control       Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID         ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4       1979  OCT   1   16.1     8.1     3.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     3.6    12.5     6.3     1.8     0.0     1.8     0.0    32.3     0.0     0.0     0.0     0.0    32.3
3.6     0.0    28.7     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT   2   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     9.6     0.0     5.7     0.0     0.0    15.2
0.0     0.0    15.2     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  OCT   3   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     3.2     0.0    12.9     0.0     0.0    16.1
0.0     0.0    16.1     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  OCT   4   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     1.1     0.0    15.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT   5   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.4     0.0    15.8     0.0     0.0    16.1
0.0     0.0    16.1     0.0 Dem_1        100.000

Dem_4       Dem_4       1979  OCT   6   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.1     0.0    16.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  OCT   7   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT   8   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  OCT   9   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  OCT  10   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4       1979  OCT  11   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  12   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  OCT  13   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  14   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  OCT  15   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4       1979  OCT  16   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  17   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  18   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  19   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  20   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4       1979  OCT  21   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  22   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
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Dem_4       Dem_4       1979  OCT  23    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  24    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  25    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4       1979  OCT  26    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  27    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  28    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  29    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1979  OCT  30    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4       1979  OCT  31    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_4       Dem_4       1980  TOT  -1   500.0   250.0     3.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     3.6   496.4   248.2     1.8     0.0     1.8     0.0    46.6     0.0   468.6     0.0     0.0   515.2
3.6     0.0   511.6     0.0 NA               -1.000


Shortage                Water Use                        Station In/Out                      Station Balance
                                                                From River By                      From Carrier By
Carried                ________________ _______________________________ _______________________________________
______________________________
                                          Total      CU _______________________________    From ______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_4       Dem_4       1979  NOV   1    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     1.4     0.0    16.0     0.0     0.0    17.5
0.0     0.0    17.5     0.0 ISF          100.000
Dem_4       Dem_4       1979  NOV   2    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.5     0.0    16.2     0.0     0.0    16.7
0.0     0.0    16.7     0.0 ISF          100.000
Dem_4       Dem_4       1979  NOV   3    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.2     0.0    16.5     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV   4    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.1     0.0    16.6     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV   5    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.6     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000

Dem_4       Dem_4       1979  NOV   6    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV   7    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV   8    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 ISF          100.000
Dem_4       Dem_4       1979  NOV   9    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  10    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
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Dem_4       Dem_4       1979  NOV  11    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  12    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  13    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  14    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  15    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000

Dem_4       Dem_4       1979  NOV  16    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  17    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  18    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  19    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  20    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000

Dem_4       Dem_4       1979  NOV  21    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  22    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  23    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  24    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  25    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000

Dem_4       Dem_4       1979  NOV  26    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  27    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  28    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  29    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1979  NOV  30    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______

Dem_4       Dem_4       1980  TOT  -1   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     2.2     0.0   498.7     0.0     0.0   500.8
0.0     0.0   500.8     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                        Station Balance
                                                                From River By                          From Carrier By
Carried                _______________ _______________________________ _______________________________________
_______________________________
                                         Total      CU ______________________________     From ______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control        Control
Structure   River                           Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short       CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day       NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)     (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)             (31)
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Dem_4	Dem_4	1979	DEC	1	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.4	0.0	0.0	16.4	0.0	0.0	16.4	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	2	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	3	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	4	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	5	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	6	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	7	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	8	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	9	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	10	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	11	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	12	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	13	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	14	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	15	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	16	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	17	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	18	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	19	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	20	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	21	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	22	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	23	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	24	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	25	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	26	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000
Dem_4	Dem_4	1979	DEC	27	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	8.1	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	16.1	0.0	0.0	16.1	0.0	ISF	100.000

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Dem_4       Dem_4       1979  DEC  28    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1979  DEC  29    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1979  DEC  30    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000

Dem_4       Dem_4       1979  DEC  31    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
___________ __________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_4       Dem_4       1980  TOT  -1   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.3     0.0     0.0   500.3
0.0     0.0   500.3     0.0 NA           -1.000


Shortage               Water Use                        Station In/Out                      Station Balance
                                                              From River By                          From Carrier By
Carried               ________________ _______________________________ _______________________________________
________________________________
                                             Total      CU _______________________________    From ______________________
or    From   Total   Total      CU                 To  Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                NA
                                            ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_4       Dem_4       1980  JAN   1    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN   2    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN   3    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN   4    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN   5    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000

Dem_4       Dem_4       1980  JAN   6    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN   7    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN   8    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN   9    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN  10    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000

Dem_4       Dem_4       1980  JAN  11    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN  12    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN  13    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN  14    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JAN  15    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
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Dem_4       Dem_4       1980  JAN  16    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  17    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  18    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  19    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  20    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4       1980  JAN  21    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  22    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  23    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  24    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  25    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4       1980  JAN  26    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  27    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  28    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  29    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JAN  30    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4       1980  JAN  31    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4       1980  TOT  -1   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA            -1.000


Shortage                Water Use                          Station In/Out                         Station Balance
                                                                  From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short     CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4       1980  FEB   1    17.9     8.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    17.9     8.9     0.0     0.0     0.0     0.0     4.6     0.0    15.8     0.0     0.0    20.4
0.0     0.0    20.4     0.0 Dem_1        100.000
Dem_4       Dem_4       1980  FEB   2    17.9     8.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    17.9     8.9     0.0     0.0     0.0     0.0     1.5     0.0    16.3     0.0     0.0    17.9
0.0     0.0    17.9     0.0 ISF          100.000
Dem_4       Dem_4       1980  FEB   3    17.9     8.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    17.9     8.9     0.0     0.0     0.0     0.0     0.5     0.0    17.3     0.0     0.0    17.9
0.0     0.0    17.9     0.0 Dem_1        100.000
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Dem_4 Dem_4 1980 FEB 4 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.2 0.0 17.7 0.0 0.0 17.9
0.0 0.0 17.9 0.0 ISF 100.000
Dem_4 Dem_4 1980 FEB 5 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.1 0.0 17.8 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000

Dem_4 Dem_4 1980 FEB 6 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.8 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 7 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 8 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 ISF 100.000
Dem_4 Dem_4 1980 FEB 9 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 ISF 100.000
Dem_4 Dem_4 1980 FEB 10 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000

Dem_4 Dem_4 1980 FEB 11 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 12 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 13 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 14 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 15 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000

Dem_4 Dem_4 1980 FEB 16 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 17 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 18 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 19 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 20 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000

Dem_4 Dem_4 1980 FEB 21 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 22 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 23 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 24 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 25 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000

Dem_4 Dem_4 1980 FEB 26 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 27 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000
Dem_4 Dem_4 1980 FEB 28 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 17.9 8.9 0.0 0.0 0.0 0.0 0.0 0.0 17.9 0.0 0.0 17.9
0.0 0.0 17.9 0.0 Dem_1 100.000

Dem_4 Dem_4 1980 TOT -1 500.0 250.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 500.0 250.0 0.0 0.0 0.0 0.0 6.9 0.0 495.7 0.0 0.0 502.6
0.0 0.0 502.6 0.0 NA -1.000
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Shortage               Water Use                         Station In/Out                        Station Balance
                                                                From River By                           From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU ______________________________    From _______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4        1980  MAR   1    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    17.0     0.0     0.0    17.0
0.0     0.0    17.0     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR   2    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR   3    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR   4    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR   5    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4        1980  MAR   6    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR   7    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR   8    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR   9    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR  10    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4        1980  MAR  11    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR  12    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR  13    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR  14    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR  15    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4        1980  MAR  16    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR  17    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR  18    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR  19    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4        1980  MAR  20    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4        1980  MAR  21    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
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Dem_4       Dem_4       1980  MAR  22    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  MAR  23    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  MAR  24    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  MAR  25    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4       1980  MAR  26    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  MAR  27    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  MAR  28    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  MAR  29    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  MAR  30    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000

Dem_4       Dem_4       1980  MAR  31    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4       1980  TOT  -1   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.9     0.0     0.0   500.9
0.0     0.0   500.9     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                    Station Balance
                                                                From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
________________________________
                                                 Total      CU _______________________________    From _______________________
or    From   Total   Total      CU             To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day     NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4       1980  APR   1    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     1.4     0.0    16.0     0.0     0.0    17.5
0.0     0.0    17.5     0.0 ISF          100.000
Dem_4       Dem_4       1980  APR   2    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.5     0.0    16.2     0.0     0.0    16.7
0.0     0.0    16.7     0.0 ISF          100.000
Dem_4       Dem_4       1980  APR   3    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.2     0.0    16.5     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1980  APR   4    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.1     0.0    16.6     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1980  APR   5    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.6     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000

Dem_4       Dem_4       1980  APR   6    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1980  APR   7    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4       Dem_4       1980  APR   8    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 ISF          100.000
Dem_4       Dem_4       1980  APR   9    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
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Dem_4        Dem_4        1980  APR  10    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000

Dem_4        Dem_4        1980  APR  11    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  12    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  13    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  14    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  15    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000

Dem_4        Dem_4        1980  APR  16    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  17    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  18    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  19    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  20    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000

Dem_4        Dem_4        1980  APR  21    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  22    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  23    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  24    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  25    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000

Dem_4        Dem_4        1980  APR  26    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  27    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  28    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  29    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
Dem_4        Dem_4        1980  APR  30    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.7     8.3     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0    16.7
0.0     0.0    16.7     0.0 Dem_1        100.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_4        Dem_4        1980  TOT  -1   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     2.2     0.0   498.7     0.0     0.0   500.8
0.0     0.0   500.8     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                         Station Balance
                                                                 From River By                             From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________    From ______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control           Control
Structure   River                            Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID            Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                NA
```

					(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)
Dem_4	Dem_4	1980	MAY	1	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.4	0.0	0.0	145.4	16.1	0.0	129.3	40.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	2	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	43.2	NA	-1.000
Dem_4	Dem_4	1980	MAY	3	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.8	NA	-1.000
Dem_4	Dem_4	1980	MAY	4	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	5	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	6	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	7	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	8	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	9	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	10	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	11	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	12	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	13	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	14	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	15	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	16	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	17	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	18	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	19	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	20	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	21	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	22	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	23	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	24	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	25	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000
Dem_4	Dem_4	1980	MAY	26	16.1	8.1	16.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.1	0.0	0.0	8.1	0.0	8.1	0.0	129.0	0.0	16.1	0.0	0.0	145.2	16.1	0.0	129.0	42.7	NA	-1.000

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Dem_4       Dem_4       1980  MAY  27    16.1     8.1    16.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.1     0.0     0.0     8.1     0.0     8.1     0.0   129.0     0.0    16.1     0.0     0.0   145.2
16.1     0.0   129.0    42.7 NA           -1.000
Dem_4       Dem_4       1980  MAY  28    16.1     8.1    16.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.1     0.0     0.0     8.1     0.0     8.1     0.0   129.0     0.0    16.1     0.0     0.0   145.2
16.1     0.0   129.0    42.7 NA           -1.000
Dem_4       Dem_4       1980  MAY  29    16.1     8.1    16.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.1     0.0     0.0     8.1     0.0     8.1     0.0   129.0     0.0    16.1     0.0     0.0   145.2
16.1     0.0   129.0    42.7 NA           -1.000
Dem_4       Dem_4       1980  MAY  30    16.1     8.1    16.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.1     0.0     0.0     8.1     0.0     8.1     0.0   129.0     0.0    16.1     0.0     0.0   145.2
16.1     0.0   129.0    42.7 NA           -1.000

Dem_4       Dem_4       1980  MAY  31    16.1     8.1    16.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.1     0.0     0.0     8.1     0.0     8.1     0.0   129.0     0.0    16.1     0.0     0.0   145.2
16.1     0.0   129.0    42.7 NA           -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4       1980  TOT  -1   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.3     0.0     0.0  4500.3
500.0     0.0  4000.3  1321.3 NA           -1.000


Shortage                Water Use                        Station In/Out                     Station Balance
                                                                From River By                      From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________    From _____________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID             Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4       1980  JUN   1    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.4     0.0     0.0   149.7
16.7     0.0   133.1    46.2 NA           -1.000
Dem_4       Dem_4       1980  JUN   2    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    47.9 NA           -1.000
Dem_4       Dem_4       1980  JUN   3    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.2 NA           -1.000
Dem_4       Dem_4       1980  JUN   4    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN   5    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000

Dem_4       Dem_4       1980  JUN   6    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN   7    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN   8    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN   9    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  10    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000

Dem_4       Dem_4       1980  JUN  11    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  12    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  13    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  14    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
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Dem_4       Dem_4       1980  JUN  15    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000

Dem_4       Dem_4       1980  JUN  16    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  17    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  18    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  19    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  20    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000

Dem_4       Dem_4       1980  JUN  21    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  22    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  23    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  24    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  25    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000

Dem_4       Dem_4       1980  JUN  26    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  27    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  28    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  29    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
Dem_4       Dem_4       1980  JUN  30    16.7     8.3    16.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    16.7     0.0     0.0     8.3     0.0     8.3     0.0   133.3     0.0    16.7     0.0     0.0   150.0
16.7     0.0   133.3    48.4 NA           -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4       1980  TOT  -1   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   499.7     0.0     0.0  4499.7
500.0     0.0  3999.7  1449.5 NA           -1.000


Shortage                Water Use                        Station In/Out                      Station Balance
                                                                From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU ______________________________    From ______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                            Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA               NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4       1980  JUL   1    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.4     0.0     0.0    16.4
0.0     0.0    16.4     0.0 ISF          100.000
Dem_4       Dem_4       1980  JUL   2    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
Dem_4       Dem_4       1980  JUL   3    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF          100.000
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Dem_4       Dem_4       1980  JUL   4   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL   5   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000

Dem_4       Dem_4       1980  JUL   6   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL   7   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL   8   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL   9   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  10   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000

Dem_4       Dem_4       1980  JUL  11   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  12   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  13   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  14   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  15   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000

Dem_4       Dem_4       1980  JUL  16   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  17   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  18   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  19   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  20   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000

Dem_4       Dem_4       1980  JUL  21   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  22   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  23   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  24   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  25   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000

Dem_4       Dem_4       1980  JUL  26   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  27   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  28   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  29   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  JUL  30   16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
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Dem_4       Dem_4       1980  JUL  31    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4       1980  TOT  -1   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.3     0.0     0.0   500.3
0.0     0.0   500.3     0.0 NA           -1.000


Shortage                Water Use                         Station In/Out                        Station Balance
                                                                 From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                                 Total      CU _______________________________    From _______________________
or    From   Total   Total      CU                  To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control          Control
Structure   River                               Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)    (+)(    (-)     (+)     (+)    (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                                  ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4       Dem_4       1980  AUG   1    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG   2    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG   3    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG   4    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG   5    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000

Dem_4       Dem_4       1980  AUG   6    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG   7    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG   8    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG   9    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG  10    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000

Dem_4       Dem_4       1980  AUG  11    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG  12    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG  13    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG  14    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG  15    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000

Dem_4       Dem_4       1980  AUG  16    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG  17    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
Dem_4       Dem_4       1980  AUG  18    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    16.1     8.1     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0    16.1
0.0     0.0    16.1     0.0 ISF         100.000
```

Dem_4 Dem_4 1980 AUG 19 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000
Dem_4 Dem_4 1980 AUG 20 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000

Dem_4 Dem_4 1980 AUG 21 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000
Dem_4 Dem_4 1980 AUG 22 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000
Dem_4 Dem_4 1980 AUG 23 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000
Dem_4 Dem_4 1980 AUG 24 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000
Dem_4 Dem_4 1980 AUG 25 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000

Dem_4 Dem_4 1980 AUG 26 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000
Dem_4 Dem_4 1980 AUG 27 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000
Dem_4 Dem_4 1980 AUG 28 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000
Dem_4 Dem_4 1980 AUG 29 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000
Dem_4 Dem_4 1980 AUG 30 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000

Dem_4 Dem_4 1980 AUG 31 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 16.1 8.1 0.0 0.0 0.0 0.0 0.0 0.0 16.1 0.0 0.0 16.1
0.0 0.0 16.1 0.0 ISF 100.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4 Dem_4 1980 TOT -1 500.0 250.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 500.0 250.0 0.0 0.0 0.0 0.0 0.0 0.0 500.0 0.0 0.0 500.0
0.0 0.0 500.0 0.0 NA -1.000

Shortage Water Use Station In/Out Station Balance
From River By From Carrier By
Carried ________________ ________________________________ ____
____
Total CU ________________________________ From ______________________
or From Total Total CU To Total Upstrm Reach Return Well From/To River
River River River Avail Control Control
Structure River Demand Demand Priorty Storage Exc_Pln Loss Well Priorty Sto_Exc Loss
Exchang SoilM Supply Short Short CU SoilM Return Loss Inflow Gain Flow Deplete GW Stor
Inflow Divert by Well Outflow Flow Location Right
ID ID Year Mo Day NA NA (+) (+) (+)((-) (+) (+) (+)((-)
(+) NA NA NA NA NA NA NA NA (+) (+) (+) (-) (+) (+)
(-) (-) (+) NA NA NA
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)
(11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25)
(26) (27) (28) (29) (30) (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_4 Dem_4 1980 SEP 1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1.4 0.0 16.0 0.0 0.0 17.5
0.0 0.0 17.5 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 2 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.5 0.0 16.2 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 3 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.2 0.0 16.5 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 4 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1 0.0 16.6 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 5 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.6 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000

Dem_4 Dem_4 1980 SEP 6 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000

Dem_4 Dem_4 1980 SEP 7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 10 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000

Dem_4 Dem_4 1980 SEP 11 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 12 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 13 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 14 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 15 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000

Dem_4 Dem_4 1980 SEP 16 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 17 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 18 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 19 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 20 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000

Dem_4 Dem_4 1980 SEP 21 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 22 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 23 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 24 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 25 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000

Dem_4 Dem_4 1980 SEP 26 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 27 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 28 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 29 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
Dem_4 Dem_4 1980 SEP 30 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 16.7 0.0 0.0 16.7
0.0 0.0 16.7 0.0 ISF 100.000
___________ ___________ _____ _____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ___________ _______
Dem_4 Dem_4 1980 TOT -1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.2 0.0 498.7 0.0 0.0 500.8
0.0 0.0 500.8 0.0 NA -1.000

Diversion Summary ACFT
ST St———————————————————————————460460460Dem_460460460460Irrigation Demand _5 Dem_Exist. Diver.
5/Inflow Dem_Exis
t. Diver. 5/Inflow

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    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage               Water Use                         Station In/Out                     Station Balance
                                                                From River By                        From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                            Total      CU _______________________________    From _______________________
or    From   Total   Total      CU                To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day       NA       NA      (+)      (+)      (+)(     (-)      (+)      (+)      (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)      (+)      (+)     (-)      (+)      (+)
(-)     (-)     (+)      NA  NA              NA
                                             ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5        1979  OCT   1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF        100.000
Dem_5       Dem_5        1979  OCT   2     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT   3     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT   4     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT   5     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Dem_5       Dem_5        1979  OCT   6     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT   7     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT   8     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT   9     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT  10     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Dem_5       Dem_5        1979  OCT  11     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT  12     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT  13     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT  14     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT  15     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Dem_5       Dem_5        1979  OCT  16     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT  17     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT  18     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5        1979  OCT  19     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
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Dem_5       Dem_5       1979  OCT  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Dem_5       Dem_5       1979  OCT  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  OCT  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  OCT  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  OCT  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  OCT  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Dem_5       Dem_5       1979  OCT  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  OCT  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  OCT  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  OCT  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  OCT  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Dem_5       Dem_5       1979  OCT  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                     Station Balance
                                                                From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                           Total      CU _______________________________    From _______________________
or    From   Total   Total      CU           To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control          Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5       1979  NOV   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  NOV   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  NOV   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  NOV   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  NOV   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000

Dem_5       Dem_5       1979  NOV   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Dem_5       Dem_5       1979  NOV   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
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Dem_5 Dem_5 1979 NOV 8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 10 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000

Dem_5 Dem_5 1979 NOV 11 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 12 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 13 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 14 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 15 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000

Dem_5 Dem_5 1979 NOV 16 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 17 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 18 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 19 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 20 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000

Dem_5 Dem_5 1979 NOV 21 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 22 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 23 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 24 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 25 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000

Dem_5 Dem_5 1979 NOV 26 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 27 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 28 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 29 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
Dem_5 Dem_5 1979 NOV 30 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 100.0 0.0 0.0 0.0 100.0
0.0 0.0 100.0 0.0 Dem_2 60.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_5 Dem_5 1980 TOT -1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 3000.0 0.0 0.0 0.0 3000.0
0.0 0.0 3000.0 0.0 NA -1.000

Shortage Water Use Station In/Out Station Balance
From River By From Carrier By
Carried ________________ _______________________________ _______________________________________
____
Total CU _______________________________ From _______________________
or From Total Total CU To Total Upstrm Reach Return Well From/To River
River River River Avail Control Control

```
Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______

_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5       1979  DEC   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1979  DEC   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1979  DEC  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1979  DEC  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1979  DEC  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
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Dem_5       Dem_5       1979  DEC  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1979  DEC  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1979  DEC  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1979  DEC  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                      Station Balance
                                                                 From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From ______________________
or    From   Total   Total      CU             To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control      Control
Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5       1980  JAN   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  JAN   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  JAN  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
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Dem_5       Dem_5       1980  JAN  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  JAN  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  JAN  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  JAN  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JAN  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  JAN  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA            -1.000


Shortage                Water Use                       Station In/Out                   Station Balance
                                                               From River By                    From Carrier By
Carried                ________________ _______________________________ _______________________________________
_____________________________
                                        Total      CU ______________________________    From _______________________
or    From   Total   Total      CU             To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control        Control
Structure   River                      Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)    (+)(    (-)     (+)     (+)    (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
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Dem_5       Dem_5       1980  FEB   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  FEB   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  FEB  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  FEB  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  FEB  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  FEB  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  FEB  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
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___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_5       Dem_5        1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                      Station Balance
                                                                 From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________    From ______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                      Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_5       Dem_5        1980  MAR   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5        1980  MAR   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5        1980  MAR  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5        1980  MAR  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  MAR  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
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Dem_5       Dem_5       1980  MAR  20     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  MAR  21     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAR  22     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAR  23     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAR  24     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAR  25     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  MAR  26     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAR  27     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAR  28     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAR  29     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAR  30     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  MAR  31     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5       1980  TOT  -1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                           From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                             Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control          Control
Structure   River                           Demand  Demand Priorty Storage Exc_Pln     Loss    Well Priorty Sto_Exc     Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA       NA      (+)      (+)      (+)(     (-)      (+)      (+)      (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA               NA
                                            ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)     (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5       1980  APR   1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  APR   2     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  APR   3     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  APR   4     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  APR   5     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  APR   6     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  APR   7     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2         60.000
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Dem_5       Dem_5       1980  APR   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000

Dem_5       Dem_5       1980  APR  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000

Dem_5       Dem_5       1980  APR  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000

Dem_5       Dem_5       1980  APR  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000

Dem_5       Dem_5       1980  APR  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Dem_5       Dem_5       1980  APR  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_5       Dem_5       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA             -1.000


Shortage                Water Use                         Station In/Out                     Station Balance
                                                                 From River By                     From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _______________________
or     From   Total   Total      CU          To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
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Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_5       Dem_5       1980  MAY   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000

Dem_5       Dem_5       1980  MAY   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000

Dem_5       Dem_5       1980  MAY  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000

Dem_5       Dem_5       1980  MAY  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000

Dem_5       Dem_5       1980  MAY  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
Dem_5       Dem_5       1980  MAY  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2        60.000
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Dem_5       Dem_5       1980  MAY  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  MAY  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAY  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAY  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAY  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  MAY  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  MAY  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0   483.9
0.0     0.0   483.9     0.0 Dem_2         60.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_5       Dem_5       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                        Station Balance
                                                                 From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                                 Total      CU _______________________________    From ____________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day       NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                NA
                                            ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)     (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_5       Dem_5       1980  JUN   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JUN   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JUN   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JUN   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JUN   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  JUN   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JUN   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JUN   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JUN   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JUN  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000

Dem_5       Dem_5       1980  JUN  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5       1980  JUN  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
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Dem_5       Dem_5        1980  JUN  13     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  14     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  15     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000

Dem_5       Dem_5        1980  JUN  16     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  17     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  18     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  19     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  20     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000

Dem_5       Dem_5        1980  JUN  21     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  22     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  23     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  24     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  25     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000

Dem_5       Dem_5        1980  JUN  26     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  27     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  28     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  29     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
Dem_5       Dem_5        1980  JUN  30     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_2         60.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5        1980  TOT  -1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                           Total      CU _______________________________    From _______________________
or     From   Total   Total     CU              To   Total        Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control        Control
Structure   River                            Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA       NA     (+)      (+)      (+)(     (-)      (+)      (+)      (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)      (+)      (+)     (-)      (+)      (+)
(-)     (-)     (+)      NA  NA             NA
                                            ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)     (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5        1980  JUL   1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
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Dem_5       Dem_5       1980  JUL   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  JUL   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  JUL  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  JUL  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  JUL  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  JUL  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  JUL  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
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Dem_5       Dem_5       1980  JUL  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  JUL  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_5       Dem_5       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                     Station Balance
                                                                From River By                       From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _______________________
or    From   Total   Total      CU             To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control          Control
Structure   River                           Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA            NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_5       Dem_5       1980  AUG   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  AUG   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  AUG  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  AUG  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
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Dem_5       Dem_5       1980  AUG  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  AUG  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  AUG  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
Dem_5       Dem_5       1980  AUG  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000

Dem_5       Dem_5       1980  AUG  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 ISF          100.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                         Station Balance
                                                                From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU ______________________________    From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control       Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA            NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5       1980  SEP   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF          100.000
Dem_5       Dem_5       1980  SEP   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF          100.000
Dem_5       Dem_5       1980  SEP   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF          100.000
Dem_5       Dem_5       1980  SEP   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF          100.000
Dem_5       Dem_5       1980  SEP   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF          100.000
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Dem_5       Dem_5       1980  SEP   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000

Dem_5       Dem_5       1980  SEP  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000

Dem_5       Dem_5       1980  SEP  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000

Dem_5       Dem_5       1980  SEP  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000

Dem_5       Dem_5       1980  SEP  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
Dem_5       Dem_5       1980  SEP  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 ISF         100.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_5       Dem_5       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA           -1.000
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Diversion Summary ACFT

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     ST
St
________________________________________________________________________________________________________________________
478478478Res_478478478478Reservoir_1             Res_Exist. Reservoir        Res_Exis
   t. Reservoir

    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.


Shortage                Water Use                         Station In/Out                          Station Balance
                                                                 From River By                           From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From ______________________
or    From   Total   Total      CU               To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short     CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1979  OCT   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-35.8     0.0   132.5     0.0 ISF          100.000
Res_1       Res_1       1979  OCT   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1979  OCT   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1979  OCT  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1979  OCT  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
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Res_1       Res_1       1979  OCT  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1979  OCT  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1979  OCT  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  OCT  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1979  OCT  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
-35.8     0.0  3035.8     0.0 NA           -1.000


Shortage                Water Use                         Station In/Out                      Station Balance
                                                                 From River By                        From Carrier By
Carried                _______________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)       NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                        ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1979  NOV   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1979  NOV   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1979  NOV   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1979  NOV   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1979  NOV   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000

Res_1       Res_1       1979  NOV   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
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Res_1       Res_1       1979  NOV   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000

Res_1       Res_1       1979  NOV  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000

Res_1       Res_1       1979  NOV  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000

Res_1       Res_1       1979  NOV  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000

Res_1       Res_1       1979  NOV  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
Res_1       Res_1       1979  NOV  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2          60.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Res_1       Res_1       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA             -1.000


Shortage                Water Use                         Station In/Out                        Station Balance
                                                                 From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
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                                          Total      CU ________________________________    From ______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA      (+)     (+)     (+)(     (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA      (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1        1979  DEC   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000

Res_1       Res_1        1979  DEC   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000

Res_1       Res_1        1979  DEC  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000

Res_1       Res_1        1979  DEC  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000

Res_1       Res_1        1979  DEC  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
Res_1       Res_1        1979  DEC  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2          60.000
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Res_1       Res_1       1979  DEC  24     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  DEC  25     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1979  DEC  26     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  DEC  27     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  DEC  28     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  DEC  29     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1979  DEC  30     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1979  DEC  31     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Res_1       Res_1       1980  TOT  -1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA           -1.000


Shortage                Water Use                       Station In/Out                       Station Balance
                                                               From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
________________________________
                                                Total      CU ______________________________    From _______________________
or    From   Total   Total      CU                  To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control       Control
Structure   River                               Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short       CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA       NA      (+)      (+)     (+)(     (-)      (+)      (+)      (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA               NA
                                           ( 1)    ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Res_1       Res_1       1980  JAN   1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  JAN   2     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  JAN   3     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  JAN   4     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  JAN   5     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1980  JAN   6     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  JAN   7     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  JAN   8     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  JAN   9     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  JAN  10     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1980  JAN  11     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
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Res_1       Res_1       1980  JAN  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Res_1       Res_1       1980  JAN  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Res_1       Res_1       1980  JAN  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Res_1       Res_1       1980  JAN  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  JAN  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Res_1       Res_1       1980  JAN  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______

Res_1       Res_1       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                        Station Balance
                                                                 From River By                         From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                        Total      CU ______________________________    From _____________________
or    From   Total   Total      CU            To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA               NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
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___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1        1980  FEB   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000

Res_1       Res_1        1980  FEB   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000

Res_1       Res_1        1980  FEB  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000

Res_1       Res_1        1980  FEB  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000

Res_1       Res_1        1980  FEB  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000

Res_1       Res_1        1980  FEB  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
Res_1       Res_1        1980  FEB  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
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Res_1       Res_1       1980  FEB  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1
0.0     0.0   107.1     0.0 Dem_2         60.000
___________ ____________  _____ _____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                         Station Balance
                                                                 From River By                          From Carrier By
Carried                 ________________ _______________________________ _______________________________________
____________________________
                                          Total      CU _______________________________    From _____________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control          Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)    (+)(     (-)     (+)     (+)    (+)(    (-)
(+)       NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ _____ _____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1980  MAR   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Res_1       Res_1       1980  MAR   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Res_1       Res_1       1980  MAR  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000

Res_1       Res_1       1980  MAR  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
Res_1       Res_1       1980  MAR  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2         60.000
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Res_1       Res_1       1980  MAR  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAR  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1980  MAR  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAR  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAR  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAR  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAR  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1980  MAR  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAR  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAR  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAR  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAR  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1980  MAR  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
0.0     0.0    96.8     0.0 Dem_2        60.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA           -1.000


Shortage                Water Use                       Station In/Out                      Station Balance
                                                               From River By                     From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                                Total      CU ______________________________    From _____________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control        Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA      (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1980  APR   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000

Res_1       Res_1       1980  APR   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
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Res_1       Res_1       1980  APR   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000

Res_1       Res_1       1980  APR  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000

Res_1       Res_1       1980  APR  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000

Res_1       Res_1       1980  APR  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000

Res_1       Res_1       1980  APR  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  APR  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
0.0     0.0   100.0     0.0 Dem_2        60.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Res_1       Res_1       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                            From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
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                                          Total      CU _______________________________    From ______________________
or    From   Total  Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River  River   River   Avail Control       Control
Structure  River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang  SoilM  Supply   Short   Short      CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID         ID          Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______

Res_1      Res_1       1980  MAY   1    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY   2    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY   3    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY   4    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY   5    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000

Res_1      Res_1       1980  MAY   6    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY   7    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY   8    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY   9    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY  10    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000

Res_1      Res_1       1980  MAY  11    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY  12    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY  13    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY  14    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY  15    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000

Res_1      Res_1       1980  MAY  16    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY  17    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY  18    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY  19    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY  20    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000

Res_1      Res_1       1980  MAY  21    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY  22    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1      Res_1       1980  MAY  23    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
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Res_1       Res_1       1980  MAY  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAY  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1980  MAY  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAY  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAY  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAY  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
Res_1       Res_1       1980  MAY  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000

Res_1       Res_1       1980  MAY  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   483.9     0.0     0.0     0.0     0.0   483.9
387.1     0.0    96.8     0.0 Dem_2        60.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 NA           -1.000


Shortage                Water Use                         Station In/Out                       Station Balance
                                                                 From River By                         From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU ______________________________    From _______________________
or    From   Total   Total      CU                To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control       Control
Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)    (+)(     (-)     (+)     (+)    (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1980  JUN   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  JUN   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  JUN   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  JUN   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  JUN   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2        60.000

Res_1       Res_1       1980  JUN   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  JUN   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  JUN   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  JUN   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2        60.000
Res_1       Res_1       1980  JUN  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2        60.000

Res_1       Res_1       1980  JUN  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2        60.000
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Res_1       Res_1       1980  JUN  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000

Res_1       Res_1       1980  JUN  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000

Res_1       Res_1       1980  JUN  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000

Res_1       Res_1       1980  JUN  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
Res_1       Res_1       1980  JUN  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
400.0     0.0   100.0     0.0 Dem_2         60.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
12000.0     0.0  3000.0     0.0 NA            -1.000


Shortage              Water Use                         Station In/Out                      Station Balance
                                                               From River By                        From Carrier By
Carried              ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control       Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day     NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
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Res_1      Res_1      1980  JUL   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-72.0    0.0  168.8    0.0 ISF          100.000
Res_1      Res_1      1980  JUL   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-77.8    0.0  174.6    0.0 ISF          100.000
Res_1      Res_1      1980  JUL   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.1    0.0  174.9    0.0 ISF          100.000
Res_1      Res_1      1980  JUL   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000

Res_1      Res_1      1980  JUL   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000

Res_1      Res_1      1980  JUL  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000

Res_1      Res_1      1980  JUL  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000

Res_1      Res_1      1980  JUL  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000

Res_1      Res_1      1980  JUL  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
Res_1      Res_1      1980  JUL  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   96.8    0.0    0.0    0.0    0.0   96.8
-78.3    0.0  175.1    0.0 ISF          100.000
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Res_1       Res_1        1980  JUL  29     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  JUL  30     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000

Res_1       Res_1        1980  JUL  31     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1        1980  TOT  -1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2420.5     0.0  5420.5     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                         From Carrier By
Carried                ________________ _______________________________ ___________________________________
_______________________________
                                          Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control       Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                 NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1        1980  AUG   1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG   2     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG   3     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG   4     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG   5     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000

Res_1       Res_1        1980  AUG   6     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG   7     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG   8     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG   9     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG  10     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000

Res_1       Res_1        1980  AUG  11     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG  12     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG  13     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG  14     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1        1980  AUG  15     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000

Res_1       Res_1        1980  AUG  16     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
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Res_1       Res_1       1980  AUG  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1       1980  AUG  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1       1980  AUG  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1       1980  AUG  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000

Res_1       Res_1       1980  AUG  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1       1980  AUG  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1       1980  AUG  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1       1980  AUG  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1       1980  AUG  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000

Res_1       Res_1       1980  AUG  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1       1980  AUG  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1       1980  AUG  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1       1980  AUG  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
Res_1       Res_1       1980  AUG  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000

Res_1       Res_1       1980  AUG  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    96.8     0.0     0.0     0.0     0.0    96.8
-78.3     0.0   175.1     0.0 ISF          100.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2427.5     0.0  5427.5     0.0 NA           -1.000


Shortage                Water Use                         Station In/Out                     Station Balance
                                                                 From River By                         From Carrier By
Carried              ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control        Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Res_1       Res_1       1980  SEP   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-77.6     0.0   177.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-77.1     0.0   177.1     0.0 ISF          100.000
Res_1       Res_1       1980  SEP   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.8     0.0   176.8     0.0 ISF          100.000
Res_1       Res_1       1980  SEP   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
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Res_1       Res_1       1980  SEP   5    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000

Res_1       Res_1       1980  SEP   6    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP   7    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP   8    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP   9    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  10    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000

Res_1       Res_1       1980  SEP  11    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  12    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  13    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  14    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  15    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000

Res_1       Res_1       1980  SEP  16    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  17    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  18    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  19    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  20    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000

Res_1       Res_1       1980  SEP  21    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  22    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  23    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  24    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  25    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000

Res_1       Res_1       1980  SEP  26    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  27    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  28    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  29    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
Res_1       Res_1       1980  SEP  30    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
-76.6     0.0   176.6     0.0 ISF          100.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Res_1       Res_1       1980  TOT  -1    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0 -
2299.3     0.0  5299.3     0.0 NA           -1.000
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    Diversion Summary  ACFT
     ST  St495495495Dem_495495495495Irrigation Demand _2    Dem_Exist. Diver. 2         Dem_Exis
   t. Diver. 2

    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                          From Carrier By
Carried                _______________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _______________________
or    From   Total   Total     CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(    (-)
(+)     NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2       1979  OCT   1    96.8    48.4    86.0    10.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   132.5     0.0     0.0     0.0     0.0   132.5
96.8     0.0    35.8     0.0 Dem_1        100.000
Dem_2       Dem_2       1979  OCT   2    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT   3    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT   4    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT   5    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1979  OCT   6    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT   7    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT   8    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT   9    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  10    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1979  OCT  11    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  12    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  13    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  14    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  15    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1979  OCT  16    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  17    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_2       Dem_2       1979  OCT  18    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  19    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  20    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1979  OCT  21    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  22    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  23    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  24    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  25    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1979  OCT  26    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  27    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  28    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  29    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  OCT  30    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1979  OCT  31    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2       1980  TOT  -1  3000.0  1500.0  2989.2    10.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3035.8     0.0     0.0     0.0     0.0  3035.8
3000.0     0.0    35.8     0.0 NA            -1.000


Shortage               Water Use                         Station In/Out                    Station Balance
                                                                From River By                       From Carrier By
Carried               _______________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________    From _______________________
or    From   Total   Total      CU                To  Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2       1979  NOV   1  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV   2  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV   3  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV   4  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV   5  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_2       Dem_2       1979  NOV   6   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV   7   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV   8   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV   9   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  10   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1979  NOV  11   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  12   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  13   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  14   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  15   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1979  NOV  16   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  17   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  18   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  19   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  20   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1979  NOV  21   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  22   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  23   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  24   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  25   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1979  NOV  26   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  27   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  28   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  29   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1979  NOV  30   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ________
Dem_2       Dem_2       1980  TOT  -1  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                       Station Balance
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                                                            From River By                  From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU ______________________________    From ______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID         ID          Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA      (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2        1979  DEC   1    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC   2    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC   3    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC   4    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC   5    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2        1979  DEC   6    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC   7    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC   8    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC   9    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC  10    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2        1979  DEC  11    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC  12    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC  13    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC  14    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC  15    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2        1979  DEC  16    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC  17    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC  18    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC  19    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC  20    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2        1979  DEC  21    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2        1979  DEC  22    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_2 Dem_2 1979 DEC 23 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1979 DEC 24 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1979 DEC 25 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000

Dem_2 Dem_2 1979 DEC 26 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1979 DEC 27 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1979 DEC 28 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1979 DEC 29 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1979 DEC 30 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000

Dem_2 Dem_2 1979 DEC 31 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2 Dem_2 1980 TOT -1 3000.0 1500.0 3000.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 3000.0 0.0 0.0 1500.0 0.0 1500.0 0.0 3000.0 0.0 0.0 0.0 0.0 3000.0
3000.0 0.0 0.0 0.0 NA -1.000

Shortage Water Use Station In/Out Station Balance
From River By From Carrier By
Carried ________________ _______________________________ _______________________________________
____
Total CU _______________________________ From _______________________
or From Total Total CU To Total Upstrm Reach Return Well From/To River
River River River Avail Control Control
Structure River Demand Demand Priorty Storage Exc_Pln Loss Well Priorty Sto_Exc Loss
Exchang SoilM Supply Short Short CU SoilM Return Loss Inflow Gain Flow Deplete GW Stor
Inflow Divert by Well Outflow Flow Location Right
ID ID Year Mo Day NA NA (+) (+) (+)((-) (+) (+) (+)((-)
(+) NA NA NA NA NA NA NA NA (+) (+) (+) (-) (+) (+)
(-) (-) (+) NA NA NA
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10)
(11) (12) (13) (14) (15) (16) (17) (18) (19) (20) (21) (22) (23) (24) (25)
(26) (27) (28) (29) (30) (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2 Dem_2 1980 JAN 1 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1980 JAN 2 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1980 JAN 3 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1980 JAN 4 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1980 JAN 5 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000

Dem_2 Dem_2 1980 JAN 6 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1980 JAN 7 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1980 JAN 8 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1980 JAN 9 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000
Dem_2 Dem_2 1980 JAN 10 96.8 48.4 96.8 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 96.8 0.0 0.0 48.4 0.0 48.4 0.0 96.8 0.0 0.0 0.0 0.0 96.8
96.8 0.0 0.0 0.0 Hgate_Limit -1.000

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Dem_2       Dem_2       1980  JAN  11    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  12    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  13    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  14    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  15    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  JAN  16    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  17    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  18    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  19    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  20    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  JAN  21    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  22    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  23    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  24    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  25    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  JAN  26    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  27    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  28    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  29    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JAN  30    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  JAN  31    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______

Dem_2       Dem_2       1980  TOT  -1  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA           -1.000


Shortage              Water Use                         Station In/Out                       Station Balance
                                                                From River By                             From Carrier By
Carried             ________________ _______________________________ _______________________________________
_______________________________
                                           Total      CU _______________________________    From _______________________
or    From   Total   Total     CU              To   Total         Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control        Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA               NA
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					(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)
Dem_2	Dem_2	1980	FEB	1	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	2	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	3	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	4	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	5	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	6	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	7	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	8	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	9	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	10	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	11	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	12	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	13	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	14	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	15	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	16	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	17	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	18	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	19	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	20	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	21	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	22	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	23	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	24	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	25	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000
Dem_2	Dem_2	1980	FEB	26	107.1	53.6	107.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	107.1	0.0	0.0	53.6	0.0	53.6	0.0	107.1	0.0	0.0	0.0	0.0	107.1	107.1	0.0	0.0	0.0	Hgate_Limit	-1.000

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Dem_2       Dem_2       1980  FEB  27   107.1    53.6   107.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   107.1     0.0     0.0    53.6     0.0    53.6     0.0   107.1     0.0     0.0     0.0     0.0   107.1
107.1     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  FEB  28   107.1    53.6   107.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   107.1     0.0     0.0    53.6     0.0    53.6     0.0   107.1     0.0     0.0     0.0     0.0   107.1
107.1     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_2       Dem_2       1980  TOT  -1  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA            -1.000


Shortage               Water Use                          Station In/Out                          Station Balance
                                                                 From River By                             From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________    From _______________________
or    From   Total   Total      CU             To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)    (+)(    (-)     (+)     (+)    (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_2       Dem_2       1980  MAR   1    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR   2    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR   3    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR   4    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR   5    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  MAR   6    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR   7    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR   8    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR   9    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR  10    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  MAR  11    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR  12    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR  13    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR  14    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR  15    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  MAR  16    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  MAR  17    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_2        Dem_2        1980  MAR  18    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  MAR  19    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  MAR  20    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2        Dem_2        1980  MAR  21    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  MAR  22    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  MAR  23    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  MAR  24    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  MAR  25    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2        Dem_2        1980  MAR  26    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  MAR  27    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  MAR  28    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  MAR  29    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  MAR  30    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2        Dem_2        1980  MAR  31    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Dem_2        Dem_2        1980  TOT  -1  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                          From Carrier By
Carried                ______________ _______________________________ _______________________________________
_______________________________
                                            Total      CU _______________________________   From _______________________
or    From   Total   Total      CU               To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                             Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                  NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Dem_2        Dem_2        1980  APR   1  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  APR   2  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  APR   3  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  APR   4  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2        Dem_2        1980  APR   5  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
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Dem_2       Dem_2       1980  APR   6   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR   7   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR   8   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR   9   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  10   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  APR  11   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  12   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  13   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  14   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  15   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  APR  16   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  17   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  18   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  19   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  20   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  APR  21   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  22   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  23   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  24   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  25   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  APR  26   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  27   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  28   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  29   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  APR  30   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2       1980  TOT  -1  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA           -1.000


Shortage            Water Use                       Station In/Out                      Station Balance
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                                                 From River By                      From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From ______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day     NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_2       Dem_2        1980  MAY   1   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY   2   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY   3   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY   4   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY   5   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000

Dem_2       Dem_2        1980  MAY   6   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY   7   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY   8   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY   9   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY  10   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000

Dem_2       Dem_2        1980  MAY  11   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY  12   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY  13   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY  14   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY  15   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000

Dem_2       Dem_2        1980  MAY  16   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY  17   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY  18   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY  19   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY  20   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000

Dem_2       Dem_2        1980  MAY  21   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
Dem_2       Dem_2        1980  MAY  22   96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA           -1.000
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Dem_2       Dem_2       1980  MAY  23    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  MAY  24    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  MAY  25    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA            -1.000

Dem_2       Dem_2       1980  MAY  26    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  MAY  27    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  MAY  28    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  MAY  29    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  MAY  30    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA            -1.000

Dem_2       Dem_2       1980  MAY  31    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0    96.8     0.0     0.0     0.0     0.0    96.8
96.8     0.0     0.0     0.0 NA            -1.000
___________ ____________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2       1980  TOT  -1  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA            -1.000


Shortage               Water Use                        Station In/Out                       Station Balance
                                                               From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2       1980  JUN   1   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN   2   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN   3   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN   4   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN   5   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 NA            -1.000

Dem_2       Dem_2       1980  JUN   6   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN   7   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN   8   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN   9   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  10   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   100.0     0.0     0.0     0.0     0.0   100.0
100.0     0.0     0.0     0.0 NA            -1.000
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Dem_2       Dem_2       1980  JUN  11   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  12   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  13   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  14   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  15   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000

Dem_2       Dem_2       1980  JUN  16   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  17   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  18   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  19   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  20   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000

Dem_2       Dem_2       1980  JUN  21   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  22   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  23   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  24   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  25   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000

Dem_2       Dem_2       1980  JUN  26   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  27   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  28   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  29   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
Dem_2       Dem_2       1980  JUN  30   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0  100.0     0.0     0.0     0.0     0.0  100.0
100.0     0.0     0.0     0.0 NA            -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2       1980  TOT  -1  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                      Station Balance
                                                                 From River By                            From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                            Total      CU _______________________________    From ______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control       Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                             ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
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___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2      Dem_2      1980  JUL   1    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   168.8     0.0     0.0     0.0     0.0   168.8
96.8     0.0    72.0     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL   2    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   174.6     0.0     0.0     0.0     0.0   174.6
96.8     0.0    77.8     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL   3    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   174.9     0.0     0.0     0.0     0.0   174.9
96.8     0.0    78.1     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL   4    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL   5    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000

Dem_2      Dem_2      1980  JUL   6    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL   7    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL   8    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL   9    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  10    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000

Dem_2      Dem_2      1980  JUL  11    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  12    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  13    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  14    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  15    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000

Dem_2      Dem_2      1980  JUL  16    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  17    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  18    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  19    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  20    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000

Dem_2      Dem_2      1980  JUL  21    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  22    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  23    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  24    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  25    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000

Dem_2      Dem_2      1980  JUL  26    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2      Dem_2      1980  JUL  27    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
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Dem_2       Dem_2       1980  JUL  28    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JUL  29    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  JUL  30    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  JUL  31    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2       1980  TOT  -1  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5420.5     0.0     0.0     0.0     0.0  5420.5
3000.0     0.0  2420.5     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                        Station Balance
                                                                 From River By                            From Carrier By
Carried                 ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU ______________________________    From ______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control      Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2       1980  AUG   1    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG   2    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG   3    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG   4    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG   5    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  AUG   6    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG   7    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG   8    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG   9    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  10    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  AUG  11    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  12    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  13    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  14    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  15    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
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Dem_2       Dem_2       1980  AUG  16    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  17    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  18    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  19    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  20    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  AUG  21    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  22    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  23    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  24    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  25    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  AUG  26    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  27    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  28    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  29    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  AUG  30    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  AUG  31    96.8    48.4    96.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    96.8     0.0     0.0    48.4     0.0    48.4     0.0   175.1     0.0     0.0     0.0     0.0   175.1
96.8     0.0    78.3     0.0 Hgate_Limit   -1.000
___________ ____________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2       1980  TOT  -1  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5427.5     0.0     0.0     0.0     0.0  5427.5
3000.0     0.0  2427.5     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
________________________________
                                                  Total      CU ______________________________    From ______________________
or    From   Total   Total      CU                 To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control       Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                            ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_2       Dem_2       1980  SEP   1  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   177.6     0.0     0.0     0.0     0.0   177.6
100.0     0.0    77.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP   2  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   177.1     0.0     0.0     0.0     0.0   177.1
100.0     0.0    77.1     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP   3  100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.8     0.0     0.0     0.0     0.0   176.8
100.0     0.0    76.8     0.0 Hgate_Limit   -1.000
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Dem_2       Dem_2       1980  SEP   4   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP   5   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  SEP   6   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP   7   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP   8   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP   9   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  10   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  SEP  11   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  12   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  13   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  14   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  15   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  SEP  16   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  17   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  18   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  19   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  20   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  SEP  21   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  22   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  23   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  24   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  25   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000

Dem_2       Dem_2       1980  SEP  26   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  27   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  28   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  29   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
Dem_2       Dem_2       1980  SEP  30   100.0    50.0   100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  100.0     0.0     0.0    50.0     0.0    50.0     0.0   176.6     0.0     0.0     0.0     0.0   176.6
100.0     0.0    76.6     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
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Dem_2       Dem_2        1980  TOT  -1  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  5299.3     0.0     0.0     0.0     0.0  5299.3
3000.0     0.0  2299.3     0.0 NA            -1.000
```

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    Gage  Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   6

    RIVER LOCATION - FROM     : Riv_50       Confluence
    RIVER LOCATION - TO       : Riv_50       Confluence


Shortage               Water Use                         Station In/Out                                Station Balance
                                                                From River By                                From Carrier By
Carried              ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA      (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
 NA         Riv_50       1979  OCT   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    64.4     0.0     0.9     0.0     0.0    65.3
0.0     0.0    65.3     0.0 NA           -1.000
 NA         Riv_50       1979  OCT   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    15.2     0.0     0.9     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1979  OCT   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1979  OCT  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1979  OCT  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
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 NA         Riv_50       1979  OCT  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1979  OCT  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1979  OCT  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1979  OCT  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1979  OCT  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
___________ ____________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
 NA         Riv_50       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   547.4     0.0     1.8     0.0     0.0   549.2
0.0     0.0   549.2     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                     Station Balance
                                                                From River By                       From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                                  Total      CU _______________________________    From _______________________
or    From   Total   Total      CU                   To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control           Control
Structure   River                               Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
 NA         Riv_50       1979  NOV   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    17.5     0.0     0.0     0.0     0.0    17.5
0.0     0.0    17.5     0.0 NA           -1.000
 NA         Riv_50       1979  NOV   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000
 NA         Riv_50       1979  NOV   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000
 NA         Riv_50       1979  NOV   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000
 NA         Riv_50       1979  NOV   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000

 NA         Riv_50       1979  NOV   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000
 NA         Riv_50       1979  NOV   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000
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 NA        Riv_50      1979  NOV   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000

 NA        Riv_50      1979  NOV  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000

 NA        Riv_50      1979  NOV  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000

 NA        Riv_50      1979  NOV  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000

 NA        Riv_50      1979  NOV  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
 NA        Riv_50      1979  NOV  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0   16.7     0.0 NA          -1.000
___________ ___________  _____ _____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
 NA        Riv_50      1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    0.0     0.0    0.0     0.0    0.0     0.0     0.0   500.8     0.0     0.0     0.0     0.0   500.8
0.0     0.0  500.8     0.0 NA          -1.000


Shortage                Water Use                         Station In/Out                     Station Balance
                                                                 From River By                      From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                                 Total      CU _______________________________    From _____________________
or    From   Total   Total      CU          To  Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
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Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short     CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______

_______ _______ _______ _______ _______ ____________ _______
 NA          Riv_50       1979  DEC   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.4     0.0     0.0     0.0     0.0    16.4
0.0     0.0    16.4     0.0 NA            -1.000
 NA          Riv_50       1979  DEC   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000

 NA          Riv_50       1979  DEC   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000

 NA          Riv_50       1979  DEC  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000

 NA          Riv_50       1979  DEC  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000

 NA          Riv_50       1979  DEC  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA          Riv_50       1979  DEC  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
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 NA         Riv_50       1979  DEC  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000

 NA         Riv_50       1979  DEC  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1979  DEC  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1979  DEC  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1979  DEC  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1979  DEC  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000

 NA         Riv_50       1979  DEC  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA         Riv_50       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0   500.3     0.0     0.0     0.0     0.0   500.3
0.0     0.0   500.3     0.0 NA            -1.000


Shortage                Water Use                         Station In/Out                         Station Balance
                                                                 From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                                 Total      CU _______________________________    From _____________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA         Riv_50       1980  JAN   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1980  JAN   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1980  JAN   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1980  JAN   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1980  JAN   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000

 NA         Riv_50       1980  JAN   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1980  JAN   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1980  JAN   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1980  JAN   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1980  JAN  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000

 NA         Riv_50       1980  JAN  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
 NA         Riv_50       1980  JAN  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0    0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA            -1.000
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 NA         Riv_50       1980  JAN  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1980  JAN  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1980  JAN  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1980  JAN  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  JAN  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1980  JAN  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
___________ ____________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA         Riv_50       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA           -1.000


Shortage                Water Use                       Station In/Out                      Station Balance
                                                               From River By                         From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _____________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control        Control
Structure   River                           Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA      (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
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 NA        Riv_50      1980  FEB   1    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   20.4    0.0    0.0    0.0    0.0   20.4
0.0    0.0   20.4    0.0 NA          -1.000
 NA        Riv_50      1980  FEB   2    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB   3    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB   4    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB   5    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000

 NA        Riv_50      1980  FEB   6    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB   7    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB   8    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB   9    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  10    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000

 NA        Riv_50      1980  FEB  11    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  12    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  13    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  14    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  15    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000

 NA        Riv_50      1980  FEB  16    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  17    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  18    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  19    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  20    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000

 NA        Riv_50      1980  FEB  21    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  22    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  23    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  24    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  25    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000

 NA        Riv_50      1980  FEB  26    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  27    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
 NA        Riv_50      1980  FEB  28    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0    0.0    0.0   0.0    0.0   0.0    0.0    0.0   17.9    0.0    0.0    0.0    0.0   17.9
0.0    0.0   17.9    0.0 NA          -1.000
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___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA         Riv_50       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   502.6     0.0     0.0     0.0     0.0   502.6
0.0     0.0   502.6     0.0 NA           -1.000


Shortage               Water Use                        Station In/Out                      Station Balance
                                                               From River By                       From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU ______________________________    From ______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)       NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA         Riv_50       1980  MAR   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    17.0     0.0     0.0     0.0     0.0    17.0
0.0     0.0    17.0     0.0 NA           -1.000
 NA         Riv_50       1980  MAR   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1980  MAR   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1980  MAR  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1980  MAR  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
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 NA         Riv_50       1980  MAR  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1980  MAR  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1980  MAR  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
 NA         Riv_50       1980  MAR  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000

 NA         Riv_50       1980  MAR  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.1     0.0     0.0     0.0     0.0    16.1
0.0     0.0    16.1     0.0 NA           -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA         Riv_50       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.9     0.0     0.0     0.0     0.0   500.9
0.0     0.0   500.9     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                     Station Balance
                                                                From River By                      From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _______________________
or    From   Total   Total     CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control          Control
Structure   River                           Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short       CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID           Year   Mo Day      NA      NA      (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA      (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA            NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA         Riv_50       1980  APR   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    17.5     0.0     0.0     0.0     0.0    17.5
0.0     0.0    17.5     0.0 NA           -1.000
 NA         Riv_50       1980  APR   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000
 NA         Riv_50       1980  APR   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000
 NA         Riv_50       1980  APR   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000
 NA         Riv_50       1980  APR   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000

 NA         Riv_50       1980  APR   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000
 NA         Riv_50       1980  APR   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA           -1.000
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 NA         Riv_50       1980  APR   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000

 NA         Riv_50       1980  APR  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000

 NA         Riv_50       1980  APR  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000

 NA         Riv_50       1980  APR  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000

 NA         Riv_50       1980  APR  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
 NA         Riv_50       1980  APR  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.7     0.0     0.0     0.0     0.0    16.7
0.0     0.0    16.7     0.0 NA            -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______

 NA         Riv_50       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.8     0.0     0.0     0.0     0.0   500.8
0.0     0.0   500.8     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU ______________________________     From _______________________
or    From   Total   Total      CU             To  Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
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Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short     CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA         Riv_50       1980  MAY   1    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.3     0.0     4.0     0.0     0.0   133.3
0.0     0.0   133.3    40.7 NA             -1.000
 NA         Riv_50       1980  MAY   2    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    43.2 NA             -1.000
 NA         Riv_50       1980  MAY   3    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.8 NA             -1.000
 NA         Riv_50       1980  MAY   4    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY   5    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000

 NA         Riv_50       1980  MAY   6    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY   7    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY   8    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY   9    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  10    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000

 NA         Riv_50       1980  MAY  11    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  12    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  13    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  14    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  15    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000

 NA         Riv_50       1980  MAY  16    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  17    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  18    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  19    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  20    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000

 NA         Riv_50       1980  MAY  21    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  22    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  23    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
 NA         Riv_50       1980  MAY  24    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA             -1.000
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 NA        Riv_50      1980  MAY  25    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA           -1.000

 NA        Riv_50      1980  MAY  26    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA           -1.000
 NA        Riv_50      1980  MAY  27    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA           -1.000
 NA        Riv_50      1980  MAY  28    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA           -1.000
 NA        Riv_50      1980  MAY  29    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA           -1.000
 NA        Riv_50      1980  MAY  30    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA           -1.000

 NA        Riv_50      1980  MAY  31    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.0     0.0     8.1     0.0     0.0   137.1
0.0     0.0   137.1    42.7 NA           -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA        Riv_50      1980  TOT  -1    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4000.3     0.0   246.0     0.0     0.0  4246.2
0.0     0.0  4246.2  1321.3 NA           -1.000


Shortage                Water Use                        Station In/Out                      Station Balance
                                                                From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                                    Total      CU _______________________________    From _____________________
or    From   Total   Total      CU                  To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                             Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID            Year   Mo Day       NA       NA      (+)      (+)      (+)(     (-)      (+)      (+)      (+)(     (-)
(+)       NA       NA       NA       NA       NA       NA       NA       NA      (+)      (+)      (+)      (-)      (+)      (+)
(-)     (-)      (+)       NA  NA                NA
                                               ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)             (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA        Riv_50      1980  JUN   1    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.1     0.0     8.2     0.0     0.0   141.3
0.0     0.0   141.3    46.2 NA           -1.000
 NA        Riv_50      1980  JUN   2    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    47.9 NA           -1.000
 NA        Riv_50      1980  JUN   3    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.2 NA           -1.000
 NA        Riv_50      1980  JUN   4    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA           -1.000
 NA        Riv_50      1980  JUN   5    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA           -1.000

 NA        Riv_50      1980  JUN   6    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA           -1.000
 NA        Riv_50      1980  JUN   7    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA           -1.000
 NA        Riv_50      1980  JUN   8    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA           -1.000
 NA        Riv_50      1980  JUN   9    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA           -1.000
 NA        Riv_50      1980  JUN  10    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA           -1.000

 NA        Riv_50      1980  JUN  11    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA           -1.000
 NA        Riv_50      1980  JUN  12    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA           -1.000
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 NA         Riv_50       1980  JUN  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000

 NA         Riv_50       1980  JUN  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000

 NA         Riv_50       1980  JUN  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000

 NA         Riv_50       1980  JUN  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
 NA         Riv_50       1980  JUN  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   133.3     0.0     8.3     0.0     0.0   141.7
0.0     0.0   141.7    48.4 NA            -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA         Riv_50       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3999.7     0.0   249.9     0.0     0.0  4249.6
0.0     0.0  4249.6  1449.5 NA            -1.000


Shortage                Water Use                       Station In/Out                       Station Balance
                                                               From River By                         From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________     From _______________________
or    From   Total   Total      CU             To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control       Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA         Riv_50       1980  JUL   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    88.4     0.0     4.2     0.0     0.0    92.6
0.0     0.0    92.6     0.0 NA            -1.000
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 NA        Riv_50      1980  JUL   2    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.9     0.0     0.0     0.0     0.0    93.9
0.0     0.0    93.9     0.0 NA           -1.000
 NA        Riv_50      1980  JUL   3    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.3     0.0     0.0     0.0     0.0    94.3
0.0     0.0    94.3     0.0 NA           -1.000
 NA        Riv_50      1980  JUL   4    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL   5    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA        Riv_50      1980  JUL   6    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL   7    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL   8    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL   9    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  10    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA        Riv_50      1980  JUL  11    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  12    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  13    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  14    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  15    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA        Riv_50      1980  JUL  16    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  17    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  18    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  19    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  20    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA        Riv_50      1980  JUL  21    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  22    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  23    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  24    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  25    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA        Riv_50      1980  JUL  26    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  27    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  28    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA        Riv_50      1980  JUL  29    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
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 NA         Riv_50       1980  JUL  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA         Riv_50       1980  JUL  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
 NA         Riv_50       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2920.8     0.0     4.2     0.0     0.0  2925.0
0.0     0.0  2925.0     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                    Station Balance
                                                                From River By                      From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control         Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)             (31)
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
 NA         Riv_50       1980  AUG   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA         Riv_50       1980  AUG   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA         Riv_50       1980  AUG  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA         Riv_50       1980  AUG  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
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 NA         Riv_50       1980  AUG  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA         Riv_50       1980  AUG  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA         Riv_50       1980  AUG  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
 NA         Riv_50       1980  AUG  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000

 NA         Riv_50       1980  AUG  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    94.4     0.0     0.0     0.0     0.0    94.4
0.0     0.0    94.4     0.0 NA           -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
 NA         Riv_50       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2927.5     0.0     0.0     0.0     0.0  2927.5
0.0     0.0  2927.5     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                         From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU ______________________________    From ______________________
or    From   Total   Total      CU                To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA            NA
                                            ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
 NA         Riv_50       1980  SEP   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    95.1     0.0     0.0     0.0     0.0    95.1
0.0     0.0    95.1     0.0 NA           -1.000
 NA         Riv_50       1980  SEP   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.8     0.0     0.0     0.0     0.0    93.8
0.0     0.0    93.8     0.0 NA           -1.000
 NA         Riv_50       1980  SEP   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.4     0.0     0.0     0.0     0.0    93.4
0.0     0.0    93.4     0.0 NA           -1.000
 NA         Riv_50       1980  SEP   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA           -1.000
 NA         Riv_50       1980  SEP   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA           -1.000
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 NA         Riv_50       1980  SEP   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000

 NA         Riv_50       1980  SEP  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000

 NA         Riv_50       1980  SEP  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000

 NA         Riv_50       1980  SEP  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000

 NA         Riv_50       1980  SEP  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
 NA         Riv_50       1980  SEP  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    93.3     0.0     0.0     0.0     0.0    93.3
0.0     0.0    93.3     0.0 NA            -1.000
___________ __________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
 NA         Riv_50       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2800.1     0.0     0.0     0.0     0.0  2800.1
0.0     0.0  2800.1     0.0 NA            -1.000


    Diversion Summary  ACFT
     ST  St529529529Dem_529529529529Municipal Demand _1     Dem_Exist. Diver. 1         Dem_Exis
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   t. Diver. 1

    STRUCTURE DATA           :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity     :     1     5000.   297525.   307442.
      Diversion Rights       :     1      100.     5950.     6149.
      Well Capacity          :     1        0.        0.        0.
      Well Rights            :     0        0.        0.        0.


Shortage                Water Use                         Station In/Out                      Station Balance
                                                                 From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
________________________________
                                          Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control     Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA      (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1        1979  OCT   1    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    65.3     0.0    24.2     0.0     0.0    89.5
64.5     0.0    25.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT   2    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT   3    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT   4    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT   5    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1        1979  OCT   6    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT   7    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT   8    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT   9    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT  10    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1        1979  OCT  11    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT  12    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT  13    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT  14    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT  15    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1        1979  OCT  16    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT  17    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1        1979  OCT  18    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5    0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
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Dem_1       Dem_1       1979  OCT  19    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  OCT  20    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000

Dem_1       Dem_1       1979  OCT  21    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  OCT  22    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  OCT  23    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  OCT  24    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  OCT  25    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000

Dem_1       Dem_1       1979  OCT  26    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  OCT  27    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  OCT  28    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  OCT  29    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  OCT  30    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000

Dem_1       Dem_1       1979  OCT  31    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1       1980  TOT  -1  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   549.2     0.0  1475.8     0.0     0.0  2025.0
2000.0     0.0    25.0     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                      Station Balance
                                                                From River By                       From Carrier By
Carried                ________________ _______________________________ ___________________________________
________________________________
                                            Total      CU _______________________________    From _______________________
or    From   Total   Total      CU               To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA               NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1       1979  NOV   1    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    17.5     0.0    49.2     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  NOV   2    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  NOV   3    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  NOV   4    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1979  NOV   5    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000

Dem_1       Dem_1       1979  NOV   6    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
```

Dem_1 Dem_1 1979 NOV 7 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 8 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 9 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 10 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000

Dem_1 Dem_1 1979 NOV 11 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 12 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 13 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 14 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 15 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000

Dem_1 Dem_1 1979 NOV 16 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 17 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 18 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 19 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 20 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000

Dem_1 Dem_1 1979 NOV 21 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 22 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 23 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 24 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 25 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000

Dem_1 Dem_1 1979 NOV 26 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 27 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 28 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 29 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000
Dem_1 Dem_1 1979 NOV 30 66.7 13.3 66.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 66.7 0.0 0.0 13.3 0.0 53.3 0.0 16.7 0.0 50.0 0.0 0.0 66.7
66.7 0.0 0.0 0.0 NA -1.000

Dem_1 Dem_1 1980 TOT -1 2000.0 400.0 2000.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 2000.0 0.0 0.0 400.0 0.0 1600.0 0.0 500.8 0.0 1499.2 0.0 0.0 2000.0
2000.0 0.0 0.0 0.0 NA -1.000

Shortage Water Use Station In/Out Station Balance
From River By From Carrier By
Carried

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                                          Total      CU _______________________________     From _____________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control        Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA      NA      (+)      (+)      (+)(     (-)      (+)      (+)      (+)(     (-)
(+)       NA      NA      NA      NA      NA      NA      NA      NA      (+)      (+)      (+)      (-)      (+)      (+)
(-)     (-)     (+)       NA  NA              NA
                                          ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)     (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______

Dem_1       Dem_1       1979  DEC   1   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.4     0.0    49.2     0.0     0.0    65.6
64.5     0.0     1.1     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC   2   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC   3   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC   4   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC   5   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1979  DEC   6   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC   7   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC   8   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC   9   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC  10   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1979  DEC  11   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC  12   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC  13   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC  14   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC  15   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1979  DEC  16   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC  17   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC  18   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC  19   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC  20   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1979  DEC  21   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC  22   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1979  DEC  23   64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
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Dem_1       Dem_1       1979  DEC  24    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1979  DEC  25    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000

Dem_1       Dem_1       1979  DEC  26    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1979  DEC  27    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1979  DEC  28    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1979  DEC  29    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1979  DEC  30    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000

Dem_1       Dem_1       1979  DEC  31    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1       1980  TOT  -1  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.3     0.0  1500.8     0.0     0.0  2001.1
2000.0     0.0     1.1     0.0 NA          -1.000


Shortage                Water Use                        Station In/Out                      Station Balance
                                                                From River By                       From Carrier By
Carried                ________________ _______________________________ _______________________________________
________________________________
                                          Total      CU ______________________________    From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA           NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1       1980  JAN   1    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1980  JAN   2    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1980  JAN   3    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1980  JAN   4    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1980  JAN   5    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000

Dem_1       Dem_1       1980  JAN   6    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1980  JAN   7    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1980  JAN   8    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1980  JAN   9    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
Dem_1       Dem_1       1980  JAN  10    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000

Dem_1       Dem_1       1980  JAN  11    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA          -1.000
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Dem_1       Dem_1       1980  JAN  12    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  13    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  14    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  15    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1980  JAN  16    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  17    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  18    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  19    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  20    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1980  JAN  21    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  22    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  23    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  24    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  25    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1980  JAN  26    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  27    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  28    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  29    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  JAN  30    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1980  JAN  31    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1       1980  TOT  -1  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA            -1.000


Shortage               Water Use                         Station In/Out                        Station Balance
                                                                From River By                          From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________    From ______________________
or    From   Total   Total      CU            To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
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Dem_1	Dem_1	1980	FEB	1	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	20.4	0.0	51.0	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	2	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	3	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	4	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	5	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	6	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	7	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	8	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	9	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	10	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	11	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	12	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	13	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	14	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	15	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	16	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	17	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	18	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	19	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	20	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	21	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	22	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	23	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	24	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	25	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	26	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000
Dem_1	Dem_1	1980	FEB	27	71.4	14.3	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	71.4	0.0	0.0	14.3	0.0	57.1	0.0	17.9	0.0	53.6	0.0	0.0	71.4	71.4	0.0	0.0	0.0	NA	-1.000

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Dem_1       Dem_1       1980  FEB  28    71.4    14.3    71.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    71.4     0.0     0.0    14.3     0.0    57.1     0.0    17.9     0.0    53.6     0.0     0.0    71.4
71.4     0.0     0.0     0.0 NA           -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1       1980  TOT  -1  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   502.6     0.0  1497.4     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                              Station Balance
                                                                From River By                              From Carrier By
Carried                 ________________ _______________________________ _______________________________________
_______________________________
                                            Total      CU _______________________________    From _____________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control          Control
Structure    River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short    Short      CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)       NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)     NA  NA              NA
                                            ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1       1980  MAR   1    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    17.0     0.0    51.0     0.0     0.0    68.0
64.5     0.0     3.5     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR   2    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR   3    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR   4    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR   5    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000

Dem_1       Dem_1       1980  MAR   6    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR   7    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR   8    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR   9    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR  10    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000

Dem_1       Dem_1       1980  MAR  11    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR  12    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR  13    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR  14    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR  15    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000

Dem_1       Dem_1       1980  MAR  16    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR  17    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  MAR  18    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA           -1.000
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Dem_1       Dem_1       1980  MAR  19    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  MAR  20    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1980  MAR  21    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  MAR  22    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  MAR  23    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  MAR  24    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  MAR  25    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1980  MAR  26    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  MAR  27    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  MAR  28    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  MAR  29    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  MAR  30    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1980  MAR  31    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    16.1     0.0    48.4     0.0     0.0    64.5
64.5     0.0     0.0     0.0 NA            -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1       1980  TOT  -1  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.9     0.0  1502.6     0.0     0.0  2003.5
2000.0     0.0     3.5     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                         From Carrier By
Carried                ________________ _______________________________ ___________________________________
________________________________
                                          Total      CU ______________________________    From _____________________
or    From   Total   Total      CU               To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln     Loss    Well Priorty Sto_Exc     Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day     NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA               NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1       1980  APR   1    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    17.5     0.0    49.2     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  APR   2    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  APR   3    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  APR   4    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA            -1.000
Dem_1       Dem_1       1980  APR   5    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA            -1.000

Dem_1       Dem_1       1980  APR   6    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA            -1.000
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Dem_1       Dem_1       1980  APR   7    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR   8    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR   9    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  10    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000

Dem_1       Dem_1       1980  APR  11    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  12    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  13    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  14    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  15    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000

Dem_1       Dem_1       1980  APR  16    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  17    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  18    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  19    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  20    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000

Dem_1       Dem_1       1980  APR  21    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  22    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  23    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  24    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  25    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000

Dem_1       Dem_1       1980  APR  26    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  27    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  28    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  29    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
Dem_1       Dem_1       1980  APR  30    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    16.7     0.0    50.0     0.0     0.0    66.7
66.7     0.0     0.0     0.0 NA           -1.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ___________ _______
Dem_1       Dem_1       1980  TOT  -1  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.8     0.0  1499.2     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA           -1.000


Shortage                Water Use                         Station In/Out                        Station Balance
                                                                 From River By                         From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
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                                          Total      CU ______________________________     From ______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______

Dem_1       Dem_1        1980  MAY   1    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   133.3     0.0    49.2     0.0     0.0   182.5
64.5     0.0   118.0    40.7 NA            -1.000
Dem_1       Dem_1        1980  MAY   2    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    43.2 NA            -1.000
Dem_1       Dem_1        1980  MAY   3    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.8 NA            -1.000
Dem_1       Dem_1        1980  MAY   4    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY   5    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000

Dem_1       Dem_1        1980  MAY   6    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY   7    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY   8    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY   9    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY  10    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000

Dem_1       Dem_1        1980  MAY  11    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY  12    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY  13    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY  14    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY  15    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000

Dem_1       Dem_1        1980  MAY  16    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY  17    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY  18    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY  19    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY  20    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000

Dem_1       Dem_1        1980  MAY  21    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY  22    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
Dem_1       Dem_1        1980  MAY  23    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA            -1.000
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Dem_1       Dem_1       1980  MAY  24    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA           -1.000
Dem_1       Dem_1       1980  MAY  25    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA           -1.000

Dem_1       Dem_1       1980  MAY  26    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA           -1.000
Dem_1       Dem_1       1980  MAY  27    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA           -1.000
Dem_1       Dem_1       1980  MAY  28    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA           -1.000
Dem_1       Dem_1       1980  MAY  29    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA           -1.000
Dem_1       Dem_1       1980  MAY  30    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA           -1.000

Dem_1       Dem_1       1980  MAY  31    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0   137.1     0.0    48.4     0.0     0.0   185.5
64.5     0.0   121.0    42.7 NA           -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1       1980  TOT  -1  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4246.2     0.0  1500.8     0.0     0.0  5747.0
2000.0     0.0  3747.0  1321.3 NA           -1.000


Shortage                Water Use                         Station In/Out                         Station Balance
                                                                 From River By                            From Carrier By
Carried                ________________ _______________________________ _______________________________________
________________________________
                                         Total      CU _______________________________    From _______________________
or    From   Total   Total      CU               To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)       NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1       1980  JUN   1    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.3     0.0    49.2     0.0     0.0   190.5
66.7     0.0   123.8    46.2 NA           -1.000
Dem_1       Dem_1       1980  JUN   2    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    47.9 NA           -1.000
Dem_1       Dem_1       1980  JUN   3    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.2 NA           -1.000
Dem_1       Dem_1       1980  JUN   4    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN   5    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000

Dem_1       Dem_1       1980  JUN   6    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN   7    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN   8    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN   9    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  10    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000

Dem_1       Dem_1       1980  JUN  11    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
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Dem_1       Dem_1       1980  JUN  12    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  13    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  14    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  15    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000

Dem_1       Dem_1       1980  JUN  16    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  17    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  18    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  19    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  20    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000

Dem_1       Dem_1       1980  JUN  21    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  22    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  23    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  24    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  25    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000

Dem_1       Dem_1       1980  JUN  26    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  27    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  28    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  29    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
Dem_1       Dem_1       1980  JUN  30    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0   141.7     0.0    50.0     0.0     0.0   191.7
66.7     0.0   125.0    48.4 NA           -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
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_______ _______ _______ _______ _______ ___________ _______
Dem_1       Dem_1       1980  TOT  -1  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4249.6     0.0  1499.2     0.0     0.0  5748.8
2000.0     0.0  3748.8  1449.5 NA           -1.000


Shortage               Water Use                      Station In/Out                       Station Balance
                                                             From River By                         From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                             Total      CU ______________________________    From _____________________
or    From   Total   Total      CU                 To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)    (+)(    (-)     (+)     (+)    (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
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Dem_1       Dem_1       1980  JUL   1    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    92.6     0.0    49.2     0.0     0.0   141.8
64.5     0.0    77.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL   2    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    93.9     0.0    48.4     0.0     0.0   142.3
64.5     0.0    77.8     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL   3    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.3     0.0    48.4     0.0     0.0   142.7
64.5     0.0    78.1     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL   4    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL   5    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000

Dem_1       Dem_1       1980  JUL   6    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL   7    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL   8    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL   9    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  10    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000

Dem_1       Dem_1       1980  JUL  11    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  12    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  13    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  14    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  15    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000

Dem_1       Dem_1       1980  JUL  16    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  17    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  18    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  19    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  20    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000

Dem_1       Dem_1       1980  JUL  21    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  22    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  23    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  24    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  25    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000

Dem_1       Dem_1       1980  JUL  26    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  27    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
Dem_1       Dem_1       1980  JUL  28    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA             -1.000
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Dem_1       Dem_1        1980  JUL  29    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  JUL  30    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000

Dem_1       Dem_1        1980  JUL  31    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1        1980  TOT  -1  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2925.0     0.0  1500.8     0.0     0.0  4425.8
2000.0     0.0  2425.8     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                        From Carrier By
Carried                ________________ _______________________________ ________________________________________
_______________________________
                                         Total      CU _______________________________    From _______________________
or     From   Total   Total      CU              To   Total         Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ _______
Dem_1       Dem_1        1980  AUG   1    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG   2    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG   3    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG   4    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG   5    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000

Dem_1       Dem_1        1980  AUG   6    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG   7    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG   8    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG   9    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG  10    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000

Dem_1       Dem_1        1980  AUG  11    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG  12    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG  13    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG  14    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
Dem_1       Dem_1        1980  AUG  15    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000

Dem_1       Dem_1        1980  AUG  16    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA           -1.000
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Dem_1       Dem_1       1980  AUG  17    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
Dem_1       Dem_1       1980  AUG  18    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
Dem_1       Dem_1       1980  AUG  19    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
Dem_1       Dem_1       1980  AUG  20    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000

Dem_1       Dem_1       1980  AUG  21    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
Dem_1       Dem_1       1980  AUG  22    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
Dem_1       Dem_1       1980  AUG  23    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
Dem_1       Dem_1       1980  AUG  24    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
Dem_1       Dem_1       1980  AUG  25    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000

Dem_1       Dem_1       1980  AUG  26    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
Dem_1       Dem_1       1980  AUG  27    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
Dem_1       Dem_1       1980  AUG  28    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
Dem_1       Dem_1       1980  AUG  29    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
Dem_1       Dem_1       1980  AUG  30    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000

Dem_1       Dem_1       1980  AUG  31    64.5    12.9    64.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    64.5     0.0     0.0    12.9     0.0    51.6     0.0    94.4     0.0    48.4     0.0     0.0   142.8
64.5     0.0    78.3     0.0 NA            -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_1       Dem_1       1980  TOT  -1  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  2927.5     0.0  1500.0     0.0     0.0  4427.5
2000.0     0.0  2427.5     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                        Station Balance
                                                                From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU ______________________________     From ______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control       Control
Structure   River                           Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_1       Dem_1       1980  SEP   1    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    95.1     0.0    49.2     0.0     0.0   144.3
66.7     0.0    77.6     0.0 NA            -1.000
Dem_1       Dem_1       1980  SEP   2    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    93.8     0.0    50.0     0.0     0.0   143.8
66.7     0.0    77.1     0.0 NA            -1.000
Dem_1       Dem_1       1980  SEP   3    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    93.4     0.0    50.0     0.0     0.0   143.4
66.7     0.0    76.8     0.0 NA            -1.000
Dem_1       Dem_1       1980  SEP   4    66.7    13.3    66.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    66.7     0.0     0.0    13.3     0.0    53.3     0.0    93.3     0.0    50.0     0.0     0.0   143.3
66.7     0.0    76.6     0.0 NA            -1.000
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Dem_1      Dem_1      1980  SEP   5   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000

Dem_1      Dem_1      1980  SEP   6   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP   7   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP   8   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP   9   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  10   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000

Dem_1      Dem_1      1980  SEP  11   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  12   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  13   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  14   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  15   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000

Dem_1      Dem_1      1980  SEP  16   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  17   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  18   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  19   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  20   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000

Dem_1      Dem_1      1980  SEP  21   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  22   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  23   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  24   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  25   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000

Dem_1      Dem_1      1980  SEP  26   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  27   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  28   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  29   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
Dem_1      Dem_1      1980  SEP  30   66.7   13.3   66.7    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0   66.7    0.0    0.0   13.3    0.0   53.3    0.0   93.3    0.0   50.0    0.0    0.0  143.3
66.7    0.0   76.6    0.0 NA          -1.000
__________ __________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Dem_1      Dem_1      1980  TOT  -1  2000.0  400.0  2000.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0    0.0  2000.0    0.0    0.0  400.0    0.0  1600.0    0.0  2800.1    0.0  1499.2    0.0    0.0  4299.3
2000.0    0.0  2299.3    0.0 NA          -1.000
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    Diversion Summary  ACFT
     ST  St547547547ISF 547547547547Instream Demand         ISF Top Instream Flow       ISF.Bott
   om Instream Flow

    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                Water Use                       Station In/Out                      Station Balance
                                                                 From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                        Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                      Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow     Flow Location       Right
ID          ID          Year   Mo Day      NA      NA      (+)     (+)     (+)(     (-)      (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                        ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
ISF         ISF         1979  OCT   1   129.9     0.0    20.6    25.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    45.6    84.3     0.0     0.0     0.0    45.6     0.0    25.0     0.0    20.6     0.0     0.0    45.6
45.6     0.0    45.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT   2   129.9     0.0    36.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    36.1    93.8     0.0     0.0     0.0    36.1     0.0     0.0     0.0    36.1     0.0     0.0    36.1
36.1     0.0    36.1     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT   3   129.9     0.0    46.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    46.5    83.5     0.0     0.0     0.0    46.5     0.0     0.0     0.0    46.5     0.0     0.0    46.5
46.5     0.0    46.5     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT   4   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT   5   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  OCT   6   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT   7   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT   8   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT   9   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  10   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  OCT  11   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  12   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  13   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  14   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  15   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  OCT  16   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  17   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
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ISF         ISF         1979  OCT  18   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  19   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  20   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  OCT  21   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  22   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  23   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  24   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  25   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  OCT  26   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  27   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  28   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  29   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  OCT  30   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  OCT  31   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF         1980  TOT  -1  4027.5     0.0  1548.4    25.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1573.4  2454.1     0.0     0.0     0.0  1573.4     0.0    25.0     0.0  1548.4     0.0     0.0  1573.4
1573.4     0.0  1573.4     0.0 NA           -1.000


Shortage               Water Use                         Station In/Out                        Station Balance
                                                                From River By                            From Carrier By
Carried                ______________ _______________________________ _______________________________________
_______________________________
                                                Total      CU ______________________________    From _______________________
or    From   Total   Total      CU                To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control        Control
Structure   River                           Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                            ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF         1979  NOV   1   129.9     0.0    52.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    52.3    77.6     0.0     0.0     0.0    52.3     0.0     0.0     0.0    52.3     0.0     0.0    52.3
52.3     0.0    52.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV   2   129.9     0.0    52.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    52.8    77.1     0.0     0.0     0.0    52.8     0.0     0.0     0.0    52.8     0.0     0.0    52.8
52.8     0.0    52.8     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV   3   129.9     0.0    53.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.2    76.8     0.0     0.0     0.0    53.2     0.0     0.0     0.0    53.2     0.0     0.0    53.2
53.2     0.0    53.2     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV   4   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV   5   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
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ISF         ISF         1979  NOV   6   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV   7   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV   8   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV   9   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  10   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  NOV  11   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  12   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  13   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  14   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  15   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  NOV  16   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  17   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  18   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  19   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  20   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  NOV  21   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  22   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  23   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  24   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  25   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  NOV  26   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  27   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  28   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  29   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  NOV  30   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
ISF         ISF         1980  TOT  -1  3897.6     0.0  1598.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1598.3  2299.3     0.0     0.0     0.0  1598.3     0.0     0.0     0.0  1598.3     0.0     0.0  1598.3
1598.3     0.0  1598.3     0.0 NA            -1.000


Shortage              Water Use                    Station In/Out                  Station Balance
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                                                                   From River By                     From Carrier By
Carried                 ________________ _______________________________ _______________________________________
________________________________
                                          Total      CU ______________________________    From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID        ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)         (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF         1979  DEC   1   129.9     0.0    53.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.7    76.2     0.0     0.0     0.0    53.7     0.0     1.1     0.0    52.6     0.0     0.0    53.7
53.7     0.0    53.7     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC   2   129.9     0.0    52.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    52.1    77.8     0.0     0.0     0.0    52.1     0.0     0.0     0.0    52.1     0.0     0.0    52.1
52.1     0.0    52.1     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC   3   129.9     0.0    51.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.8    78.1     0.0     0.0     0.0    51.8     0.0     0.0     0.0    51.8     0.0     0.0    51.8
51.8     0.0    51.8     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC   4   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC   5   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  DEC   6   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC   7   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC   8   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC   9   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  10   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  DEC  11   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  12   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  13   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  14   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  15   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  DEC  16   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  17   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  18   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  19   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  20   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  DEC  21   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  22   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
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ISF         ISF         1979  DEC  23   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  24   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  25   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  DEC  26   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  27   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  28   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  29   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1979  DEC  30   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1979  DEC  31   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF         1980  TOT  -1  4027.5     0.0  1602.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1602.8  2424.7     0.0     0.0     0.0  1602.8     0.0     1.1     0.0  1601.7     0.0     0.0  1602.8
1602.8     0.0  1602.8     0.0 NA            -1.000


Shortage                Water Use                       Station In/Out                     Station Balance
                                                               From River By                      From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _____________________
or    From   Total   Total      CU             To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF         1980  JAN   1   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN   2   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN   3   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN   4   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN   5   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  JAN   6   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN   7   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN   8   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN   9   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  10   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
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ISF         ISF         1980  JAN  11   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  12   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  13   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  14   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  15   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  JAN  16   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  17   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  18   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  19   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  20   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  JAN  21   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  22   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  23   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  24   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  25   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  JAN  26   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  27   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  28   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  29   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JAN  30   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  JAN  31   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
ISF         ISF         1980  TOT  -1  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 NA           -1.000


Shortage               Water Use                         Station In/Out                      Station Balance
                                                                From River By                           From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                            Total      CU ______________________________     From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control        Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc     Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
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                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
ISF         ISF          1980  FEB   1  129.9     0.0    53.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.8    76.1    0.0     0.0     0.0    53.8     0.0     0.0     0.0    53.8     0.0     0.0    53.8
53.8     0.0    53.8     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB   2  129.9     0.0    55.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    55.5    74.4    0.0     0.0     0.0    55.5     0.0     0.0     0.0    55.5     0.0     0.0    55.5
55.5     0.0    55.5     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB   3  129.9     0.0    56.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    56.6    73.3    0.0     0.0     0.0    56.6     0.0     0.0     0.0    56.6     0.0     0.0    56.6
56.6     0.0    56.6     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB   4  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB   5  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  FEB   6  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB   7  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB   8  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB   9  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  10  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  FEB  11  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  12  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  13  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  14  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  15  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  FEB  16  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  17  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  18  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  19  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  20  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  FEB  21  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  22  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  23  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  24  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  25  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  FEB  26  129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8    0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
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ISF         ISF          1980  FEB  27   129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8     0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  FEB  28   129.9     0.0    57.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    57.1    72.8     0.0     0.0     0.0    57.1     0.0     0.0     0.0    57.1     0.0     0.0    57.1
57.1     0.0    57.1     0.0 Hgate_Limit   -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF          1980  TOT  -1  3637.7     0.0  1594.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1594.5  2043.3     0.0     0.0     0.0  1594.5     0.0     0.0     0.0  1594.5     0.0     0.0  1594.5
1594.5     0.0  1594.5     0.0 NA            -1.000


Shortage                Water Use                       Station In/Out                       Station Balance
                                                                From River By                        From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                                Total      CU _______________________________     From _______________________
or    From   Total   Total      CU               To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA      (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA                NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)             (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF          1980  MAR   1   129.9     0.0    58.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    58.4    71.5     0.0     0.0     0.0    58.4     0.0     3.5     0.0    54.9     0.0     0.0    58.4
58.4     0.0    58.4     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR   2   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR   3   129.9     0.0    52.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    52.2    77.8     0.0     0.0     0.0    52.2     0.0     0.0     0.0    52.2     0.0     0.0    52.2
52.2     0.0    52.2     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR   4   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR   5   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  MAR   6   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR   7   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR   8   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR   9   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR  10   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  MAR  11   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR  12   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR  13   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR  14   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR  15   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  MAR  16   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  MAR  17   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
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ISF         ISF         1980  MAR  18   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  MAR  19   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  MAR  20   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  MAR  21   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  MAR  22   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  MAR  23   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  MAR  24   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  MAR  25   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  MAR  26   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  MAR  27   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  MAR  28   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  MAR  29   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  MAR  30   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  MAR  31   129.9     0.0    51.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    51.6    78.3     0.0     0.0     0.0    51.6     0.0     0.0     0.0    51.6     0.0     0.0    51.6
51.6     0.0    51.6     0.0 Hgate_Limit   -1.000
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______

ISF         ISF         1980  TOT  -1  4027.5     0.0  1609.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1609.0  2418.5     0.0     0.0     0.0  1609.0     0.0     3.5     0.0  1605.5     0.0     0.0  1609.0
1609.0     0.0  1609.0     0.0 NA           -1.000


Shortage              Water Use                         Station In/Out                       Station Balance
                                                               From River By                          From Carrier By
Carried               _______________ _______________________________ _______________________________________
_______________________________
                                            Total      CU _______________________________    From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow     Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)         (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF         1980  APR   1   129.9     0.0    52.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    52.3    77.6     0.0     0.0     0.0    52.3     0.0     0.0     0.0    52.3     0.0     0.0    52.3
52.3     0.0    52.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  APR   2   129.9     0.0    52.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    52.8    77.1     0.0     0.0     0.0    52.8     0.0     0.0     0.0    52.8     0.0     0.0    52.8
52.8     0.0    52.8     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  APR   3   129.9     0.0    53.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.2    76.8     0.0     0.0     0.0    53.2     0.0     0.0     0.0    53.2     0.0     0.0    53.2
53.2     0.0    53.2     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  APR   4   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  APR   5   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
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ISF         ISF          1980  APR   6   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR   7   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR   8   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR   9   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  10   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  APR  11   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  12   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  13   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  14   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  15   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  APR  16   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  17   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  18   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  19   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  20   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  APR  21   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  22   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  23   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  24   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  25   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  APR  26   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  27   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  28   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  29   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  APR  30   129.9     0.0    53.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    53.3    76.6     0.0     0.0     0.0    53.3     0.0     0.0     0.0    53.3     0.0     0.0    53.3
53.3     0.0    53.3     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF          1980  TOT  -1  3897.6     0.0  1598.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1598.3  2299.3     0.0     0.0     0.0  1598.3     0.0     0.0     0.0  1598.3     0.0     0.0  1598.3
1598.3     0.0  1598.3     0.0 NA            -1.000


Shortage             Water Use                       Station In/Out                      Station Balance
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                                                                From River By                 From Carrier By
Carried              ________________ _______________________________ _______________________________________
________________________________
                                             Total      CU ______________________________     From ______________________
or    From   Total   Total      CU                    To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short    Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                              ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)     (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF         1980  MAY   1   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   118.0     0.0    52.6     0.0     0.0   170.7
129.9     0.0   170.7    40.7 NA            -1.000
ISF         ISF         1980  MAY   2   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    52.1     0.0     0.0   173.1
129.9     0.0   173.1    43.2 NA            -1.000
ISF         ISF         1980  MAY   3   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.8     0.0     0.0   172.8
129.9     0.0   172.8    42.8 NA            -1.000
ISF         ISF         1980  MAY   4   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY   5   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000

ISF         ISF         1980  MAY   6   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY   7   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY   8   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY   9   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY  10   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000

ISF         ISF         1980  MAY  11   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY  12   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY  13   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY  14   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY  15   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000

ISF         ISF         1980  MAY  16   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY  17   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY  18   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY  19   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY  20   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000

ISF         ISF         1980  MAY  21   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF         1980  MAY  22   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
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ISF         ISF          1980  MAY  23   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF          1980  MAY  24   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF          1980  MAY  25   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000

ISF         ISF          1980  MAY  26   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF          1980  MAY  27   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF          1980  MAY  28   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF          1980  MAY  29   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
ISF         ISF          1980  MAY  30   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000

ISF         ISF          1980  MAY  31   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   121.0     0.0    51.6     0.0     0.0   172.6
129.9     0.0   172.6    42.7 NA            -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF          1980  TOT  -1  4027.5     0.0  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  3747.0     0.0  1601.7     0.0     0.0  5348.8
4027.5     0.0  5348.8  1321.3 NA            -1.000


Shortage                Water Use                        Station In/Out                     Station Balance
                                                                From River By                      From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _____________________
or    From   Total   Total      CU              To  Total          Upstrm   Reach  Return    Well From/To   River
River  River   River  Avail Control      Control
Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)    (+)(    (-)     (+)     (+)    (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF          1980  JUN   1   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   123.8     0.0    52.3     0.0     0.0   176.1
129.9     0.0   176.1    46.2 NA            -1.000
ISF         ISF          1980  JUN   2   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    52.8     0.0     0.0   177.8
129.9     0.0   177.8    47.9 NA            -1.000
ISF         ISF          1980  JUN   3   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.2     0.0     0.0   178.2
129.9     0.0   178.2    48.2 NA            -1.000
ISF         ISF          1980  JUN   4   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF          1980  JUN   5   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000

ISF         ISF          1980  JUN   6   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF          1980  JUN   7   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF          1980  JUN   8   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF          1980  JUN   9   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF          1980  JUN  10   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
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ISF         ISF         1980  JUN  11   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  12   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  13   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  14   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  15   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000

ISF         ISF         1980  JUN  16   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  17   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  18   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  19   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  20   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000

ISF         ISF         1980  JUN  21   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  22   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  23   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  24   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  25   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000

ISF         ISF         1980  JUN  26   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  27   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  28   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  29   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
ISF         ISF         1980  JUN  30   129.9     0.0   129.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0   125.0     0.0    53.3     0.0     0.0   178.3
129.9     0.0   178.3    48.4 NA            -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
ISF         ISF         1980  TOT  -1  3897.6     0.0  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0  3748.8     0.0  1598.3     0.0     0.0  5347.1
3897.6     0.0  5347.1  1449.5 NA            -1.000


Shortage              Water Use                        Station In/Out                    Station Balance
                                                              From River By                        From Carrier By
Carried              _______________ ______________________________ _______________________________________
______________________________
                                             Total      CU ______________________________   From ______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control       Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                        ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
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___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
ISF         ISF         1980  JUL   1   129.9     0.0    57.9    72.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    77.3     0.0    52.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL   2   129.9     0.0    52.1    77.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    77.8     0.0    52.1     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL   3   129.9     0.0    51.8    78.1     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.1     0.0    51.8     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL   4   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL   5   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  JUL   6   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL   7   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL   8   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL   9   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  10   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  JUL  11   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  12   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  13   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  14   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  15   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  JUL  16   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  17   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  18   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  19   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  20   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  JUL  21   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  22   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  23   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  24   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  25   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  JUL  26   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  JUL  27   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
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ISF         ISF          1980  JUL  28   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  JUL  29   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  JUL  30   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  JUL  31   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
___________ __________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
ISF         ISF          1980  TOT  -1  4027.5     0.0  1607.0  2420.5     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  2425.8     0.0  1601.7     0.0     0.0  4027.5
4027.5     0.0  4027.5     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                          Station Balance
                                                                From River By                               From Carrier By
Carried                 ________________ _______________________________ _______________________________________
_______________________________
                                        Total      CU _______________________________    From _______________________
or    From   Total   Total      CU                To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)    (+)(    (-)     (+)     (+)    (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                         ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
ISF         ISF          1980  AUG   1   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG   2   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG   3   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG   4   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG   5   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  AUG   6   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG   7   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG   8   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG   9   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  10   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  AUG  11   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  12   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  13   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  14   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  15   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
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ISF         ISF          1980  AUG  16   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  17   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  18   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  19   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  20   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  AUG  21   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  22   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  23   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  24   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  25   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  AUG  26   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  27   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  28   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  29   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  AUG  30   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000

ISF         ISF          1980  AUG  31   129.9     0.0    51.6    78.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    78.3     0.0    51.6     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
ISF         ISF          1980  TOT  -1  4027.5     0.0  1600.0  2427.5     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  2427.5     0.0  1600.0     0.0     0.0  4027.5
4027.5     0.0  4027.5     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU ________________________________    From ______________________
or    From   Total   Total      CU             To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                       Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
ISF         ISF          1980  SEP   1   129.9     0.0    52.3    77.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    77.6     0.0    52.3     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  SEP   2   129.9     0.0    52.8    77.1     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    77.1     0.0    52.8     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
ISF         ISF          1980  SEP   3   129.9     0.0    53.2    76.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9     0.0    76.8     0.0    53.2     0.0     0.0   129.9
129.9     0.0   129.9     0.0 Hgate_Limit   -1.000
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ISF         ISF         1980  SEP   4   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP   5   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  SEP   6   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP   7   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP   8   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP   9   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  10   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  SEP  11   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  12   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  13   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  14   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  15   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  SEP  16   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  17   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  18   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  19   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  20   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  SEP  21   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  22   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  23   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  24   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  25   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000

ISF         ISF         1980  SEP  26   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  27   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  28   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  29   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
ISF         ISF         1980  SEP  30   129.9     0.0    53.3    76.6     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  129.9     0.0     0.0     0.0     0.0  129.9     0.0    76.6     0.0    53.3     0.0     0.0  129.9
129.9     0.0  129.9     0.0 Hgate_Limit   -1.000
___________ ___________ _____ _____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
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ISF         ISF          1980  TOT  -1  3897.6     0.0  1598.3  2299.3     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0  2299.3     0.0  1598.3     0.0     0.0  3897.6
3897.6     0.0  3897.6     0.0 NA           -1.000


    Diversion Summary  ACFT
     ST  St       564564564Base564564564564Bottom Instream Flow    ISF.Bottom Instream Flow    ISF.Bott
   om Instream Flow


Shortage                Water Use                          Station In/Out                       Station Balance
                                                                  From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
________________________________
                                             Total      CU ________________________________    From _______________________
or    From   Total   Total      CU                 To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA      (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                            ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Baseflow    ISF.01       1979  OCT   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    45.6     0.0     0.0     0.0     0.0    45.6
0.0     0.0    45.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    36.1     0.0     0.0     0.0     0.0    36.1
0.0     0.0    36.1     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    46.5     0.0     0.0     0.0     0.0    46.5
0.0     0.0    46.5     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1979  OCT   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1979  OCT  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1979  OCT  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
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Baseflow    ISF.01       1979  OCT  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1979  OCT  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1979  OCT  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  OCT  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1979  OCT  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
___________ ____________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Baseflow    ISF.01       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1573.4     0.0     0.0     0.0     0.0  1573.4
0.0     0.0  1573.4     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                      Station Balance
                                                                From River By                       From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________    From _______________________
or    From   Total   Total      CU            To   Total         Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control        Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow     Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Baseflow    ISF.01       1979  NOV   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    52.3     0.0     0.0     0.0     0.0    52.3
0.0     0.0    52.3     0.0 NA           -1.000
Baseflow    ISF.01       1979  NOV   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    52.8     0.0     0.0     0.0     0.0    52.8
0.0     0.0    52.8     0.0 NA           -1.000
Baseflow    ISF.01       1979  NOV   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.2     0.0     0.0     0.0     0.0    53.2
0.0     0.0    53.2     0.0 NA           -1.000
Baseflow    ISF.01       1979  NOV   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA           -1.000
Baseflow    ISF.01       1979  NOV   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA           -1.000

Baseflow    ISF.01       1979  NOV   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA           -1.000
Baseflow    ISF.01       1979  NOV   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA           -1.000
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Baseflow ISF.01 1979 NOV 8 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 9 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 10 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000

Baseflow ISF.01 1979 NOV 11 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 12 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 13 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 14 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 15 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000

Baseflow ISF.01 1979 NOV 16 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 17 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 18 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 19 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 20 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000

Baseflow ISF.01 1979 NOV 21 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 22 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 23 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 24 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 25 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000

Baseflow ISF.01 1979 NOV 26 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 27 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 28 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 29 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
Baseflow ISF.01 1979 NOV 30 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 53.3 0.0 0.0 0.0 0.0 53.3
0.0 0.0 53.3 0.0 NA -1.000
___________ ___________ _____ _____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______

Baseflow ISF.01 1980 TOT -1 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 1598.3 0.0 0.0 0.0 0.0 1598.3
0.0 0.0 1598.3 0.0 NA -1.000

Shortage Water Use Station In/Out Station Balance
From River By From Carrier By
Carried _______________ ______________________________ _____________________________________
____
Total CU ______________________________ From _______________________
or From Total Total CU To Total Upstrm Reach Return Well From/To River
River River River Avail Control Control

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Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)      (-)     (+)     NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)     (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)     (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Baseflow    ISF.01      1979  DEC   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.7     0.0     0.0     0.0     0.0    53.7
0.0     0.0    53.7     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    52.1     0.0     0.0     0.0     0.0    52.1
0.0     0.0    52.1     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.8     0.0     0.0     0.0     0.0    51.8
0.0     0.0    51.8     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000

Baseflow    ISF.01      1979  DEC   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000

Baseflow    ISF.01      1979  DEC  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000

Baseflow    ISF.01      1979  DEC  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000

Baseflow    ISF.01      1979  DEC  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
Baseflow    ISF.01      1979  DEC  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA            -1.000
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Baseflow    ISF.01       1979  DEC  25     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1979  DEC  26     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  DEC  27     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  DEC  28     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  DEC  29     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1979  DEC  30     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1979  DEC  31     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Baseflow    ISF.01       1980  TOT  -1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1602.8     0.0     0.0     0.0     0.0  1602.8
0.0     0.0  1602.8     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                    Station Balance
                                                                From River By                      From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                                Total      CU _______________________________    From _______________________
or    From   Total   Total      CU               To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control      Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day       NA       NA      (+)      (+)     (+)(     (-)      (+)      (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                             ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)     (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Baseflow    ISF.01       1980  JAN   1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  JAN   2     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  JAN   3     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  JAN   4     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  JAN   5     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1980  JAN   6     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  JAN   7     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  JAN   8     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  JAN   9     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  JAN  10     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1980  JAN  11     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  JAN  12     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
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Baseflow    ISF.01       1980  JAN  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000

Baseflow    ISF.01       1980  JAN  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000

Baseflow    ISF.01       1980  JAN  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000

Baseflow    ISF.01       1980  JAN  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  JAN  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000

Baseflow    ISF.01       1980  JAN  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
___________ ____________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Baseflow    ISF.01       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0      0.0     0.0      0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0      0.0 NA            -1.000


Shortage                 Water Use                        Station In/Out                     Station Balance
                                                                 From River By                        From Carrier By
Carried                 ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU ________________________________     From _______________________
or    From   Total   Total      CU              To   Total         Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control          Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU    SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID            Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
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Baseflow    ISF.01       1980  FEB   1    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.8     0.0     0.0     0.0     0.0    53.8
0.0     0.0    53.8     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB   2    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    55.5     0.0     0.0     0.0     0.0    55.5
0.0     0.0    55.5     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB   3    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    56.6     0.0     0.0     0.0     0.0    56.6
0.0     0.0    56.6     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB   4    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB   5    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000

Baseflow    ISF.01       1980  FEB   6    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB   7    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB   8    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB   9    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  10    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000

Baseflow    ISF.01       1980  FEB  11    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  12    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  13    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  14    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  15    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000

Baseflow    ISF.01       1980  FEB  16    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  17    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  18    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  19    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  20    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000

Baseflow    ISF.01       1980  FEB  21    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  22    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  23    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  24    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  25    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000

Baseflow    ISF.01       1980  FEB  26    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  27    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
Baseflow    ISF.01       1980  FEB  28    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    57.1     0.0     0.0     0.0     0.0    57.1
0.0     0.0    57.1     0.0 NA          -1.000
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____________ ____________  ____ ____ ___ ________ ________ ________ ________ ________ ________ ________ ________ ________ ________
________ ________ ________ ________ ________ ________ ________ ________ ________ ________ ________ ________ ________ ________
________ ________ ________ ________ ________ ____________ ________
Baseflow    ISF.01       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1594.5     0.0     0.0     0.0     0.0  1594.5
0.0     0.0  1594.5     0.0 NA           -1.000


Shortage                Water Use                         Station In/Out                     Station Balance
                                                                 From River By                      From Carrier By
Carried                ________________ _______________________________ _______________________________________
________________________________
                                          Total      CU _______________________________    From ______________________
or    From   Total   Total      CU               To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID         ID          Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA           NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
____________ ____________ ____ ____ ___ ________ ________ ________ ________ ________ ________ ________ ________ ________ ________
________ ________ ________ ________ ________ ________ ________ ________ ________ ________ ________ ________ ________ ________
________ ________ ________ ________ ________ ____________ ________
Baseflow    ISF.01       1980  MAR   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    58.4     0.0     0.0     0.0     0.0    58.4
0.0     0.0    58.4     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    52.2     0.0     0.0     0.0     0.0    52.2
0.0     0.0    52.2     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1980  MAR   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1980  MAR  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000

Baseflow    ISF.01       1980  MAR  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
Baseflow    ISF.01       1980  MAR  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    51.6     0.0     0.0     0.0     0.0    51.6
0.0     0.0    51.6     0.0 NA           -1.000
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Baseflow    ISF.01       1980  MAR  20     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000

Baseflow    ISF.01       1980  MAR  21     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  MAR  22     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  MAR  23     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  MAR  24     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  MAR  25     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000

Baseflow    ISF.01       1980  MAR  26     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  MAR  27     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  MAR  28     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  MAR  29     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
Baseflow    ISF.01       1980  MAR  30     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000

Baseflow    ISF.01       1980  MAR  31     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    51.6      0.0      0.0      0.0      0.0    51.6
0.0     0.0    51.6      0.0 NA            -1.000
___________ ____________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Baseflow    ISF.01       1980  TOT  -1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0  1609.0      0.0      0.0      0.0      0.0  1609.0
0.0     0.0  1609.0      0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                      Station Balance
                                                                From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                                Total      CU ______________________________     From _______________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control          Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA       NA      (+)      (+)      (+)(     (-)      (+)      (+)      (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA      (+)      (+)      (+)      (-)      (+)      (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)     (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)            (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Baseflow    ISF.01       1980  APR   1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    52.3      0.0      0.0      0.0      0.0    52.3
0.0     0.0    52.3      0.0 NA            -1.000
Baseflow    ISF.01       1980  APR   2     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    52.8      0.0      0.0      0.0      0.0    52.8
0.0     0.0    52.8      0.0 NA            -1.000
Baseflow    ISF.01       1980  APR   3     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    53.2      0.0      0.0      0.0      0.0    53.2
0.0     0.0    53.2      0.0 NA            -1.000
Baseflow    ISF.01       1980  APR   4     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    53.3      0.0      0.0      0.0      0.0    53.3
0.0     0.0    53.3      0.0 NA            -1.000
Baseflow    ISF.01       1980  APR   5     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    53.3      0.0      0.0      0.0      0.0    53.3
0.0     0.0    53.3      0.0 NA            -1.000

Baseflow    ISF.01       1980  APR   6     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    53.3      0.0      0.0      0.0      0.0    53.3
0.0     0.0    53.3      0.0 NA            -1.000
Baseflow    ISF.01       1980  APR   7     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0      0.0     0.0     0.0     0.0      0.0      0.0    53.3      0.0      0.0      0.0      0.0    53.3
0.0     0.0    53.3      0.0 NA            -1.000
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Baseflow    ISF.01       1980  APR   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000

Baseflow    ISF.01       1980  APR  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000

Baseflow    ISF.01       1980  APR  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000

Baseflow    ISF.01       1980  APR  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000

Baseflow    ISF.01       1980  APR  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
Baseflow    ISF.01       1980  APR  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    53.3     0.0     0.0     0.0     0.0    53.3
0.0     0.0    53.3     0.0 NA            -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Baseflow    ISF.01       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1598.3     0.0     0.0     0.0     0.0  1598.3
0.0     0.0  1598.3     0.0 NA            -1.000


Shortage                Water Use                        Station In/Out                       Station Balance
                                                                From River By                          From Carrier By
Carried                _______________ ______________________________ ______________________________________
______________________________
                                          Total      CU ______________________________    From _____________________
or    From   Total   Total     CU            To   Total           Upstrm   Reach  Return    Well From/To    River
River   River   River   Avail Control       Control
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Structure   River                        Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location        Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Baseflow    ISF.01      1980  MAY   1    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   170.7     0.0     0.0     0.0     0.0   170.7
0.0     0.0   170.7    40.7 NA            -1.000
Baseflow    ISF.01      1980  MAY   2    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   173.1     0.0     0.0     0.0     0.0   173.1
0.0     0.0   173.1    43.2 NA            -1.000
Baseflow    ISF.01      1980  MAY   3    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.8     0.0     0.0     0.0     0.0   172.8
0.0     0.0   172.8    42.8 NA            -1.000
Baseflow    ISF.01      1980  MAY   4    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY   5    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000

Baseflow    ISF.01      1980  MAY   6    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY   7    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY   8    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY   9    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  10    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000

Baseflow    ISF.01      1980  MAY  11    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  12    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  13    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  14    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  15    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000

Baseflow    ISF.01      1980  MAY  16    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  17    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  18    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  19    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  20    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000

Baseflow    ISF.01      1980  MAY  21    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  22    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  23    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01      1980  MAY  24    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
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Baseflow    ISF.01       1980  MAY  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000

Baseflow    ISF.01       1980  MAY  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01       1980  MAY  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01       1980  MAY  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01       1980  MAY  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
Baseflow    ISF.01       1980  MAY  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000

Baseflow    ISF.01       1980  MAY  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   172.6     0.0     0.0     0.0     0.0   172.6
0.0     0.0   172.6    42.7 NA            -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Baseflow    ISF.01       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5348.8     0.0     0.0     0.0     0.0  5348.8
0.0     0.0  5348.8  1321.3 NA            -1.000


Shortage               Water Use                        Station In/Out                    Station Balance
                                                                From River By                    From Carrier By
Carried               ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________    From ________________________
or    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control      Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return     Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA            NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ _______
Baseflow    ISF.01       1980  JUN   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   176.1     0.0     0.0     0.0     0.0   176.1
0.0     0.0   176.1    46.2 NA            -1.000
Baseflow    ISF.01       1980  JUN   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   177.8     0.0     0.0     0.0     0.0   177.8
0.0     0.0   177.8    47.9 NA            -1.000
Baseflow    ISF.01       1980  JUN   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.2     0.0     0.0     0.0     0.0   178.2
0.0     0.0   178.2    48.2 NA            -1.000
Baseflow    ISF.01       1980  JUN   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000

Baseflow    ISF.01       1980  JUN   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000

Baseflow    ISF.01       1980  JUN  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
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Baseflow    ISF.01       1980  JUN  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000

Baseflow    ISF.01       1980  JUN  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000

Baseflow    ISF.01       1980  JUN  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000

Baseflow    ISF.01       1980  JUN  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
Baseflow    ISF.01       1980  JUN  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   178.3     0.0     0.0     0.0     0.0   178.3
0.0     0.0   178.3    48.4 NA            -1.000
___________ ____________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Baseflow    ISF.01       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5347.1     0.0     0.0     0.0     0.0  5347.1
0.0     0.0  5347.1  1449.5 NA            -1.000


Shortage                Water Use                         Station In/Out                      Station Balance
                                                                 From River By                          From Carrier By
Carried                 ________________ _______________________________ _______________________________________
_______________________________
                                          Total      CU _______________________________     From _______________________
or    From   Total   Total      CU                To   Total         Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control       Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(    (-)     (+)     (+)     (+)(    (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA             NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Baseflow    ISF.01       1980  JUL   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
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Baseflow    ISF.01       1980  JUL   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  JUL   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  JUL  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  JUL  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  JUL  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  JUL  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  JUL  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
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Baseflow    ISF.01       1980  JUL  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  JUL  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Baseflow    ISF.01       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5
0.0     0.0  4027.5     0.0 NA            -1.000


Shortage                Water Use                       Station In/Out                    Station Balance
                                                               From River By                        From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU ________________________________     From ______________________
or    From   Total   Total      CU             To   Total          Upstrm   Reach  Return     Well From/To   River
River   River   River   Avail Control        Control
Structure   River                         Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short       CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA      NA     (+)     (+)     (+)(     (-)     (+)     (+)     (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA              NA
                                          ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)          (31)
___________ ____________ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Baseflow    ISF.01       1980  AUG   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  AUG   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  AUG  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  AUG  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  AUG  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
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Baseflow    ISF.01       1980  AUG  18     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  AUG  19     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  AUG  20     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000

Baseflow    ISF.01       1980  AUG  21     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  AUG  22     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  AUG  23     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  AUG  24     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  AUG  25     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000

Baseflow    ISF.01       1980  AUG  26     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  AUG  27     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  AUG  28     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  AUG  29     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  AUG  30     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000

Baseflow    ISF.01       1980  AUG  31     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Baseflow    ISF.01       1980  TOT  -1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5
0.0     0.0  4027.5     0.0 NA           -1.000


Shortage                Water Use                        Station In/Out                         Station Balance
                                                                From River By                          From Carrier By
Carried                ________________ _______________________________ _______________________________________
_______________________________
                                         Total      CU _______________________________    From _______________________
or    From   Total   Total      CU                To  Total          Upstrm   Reach  Return    Well From/To   River
River   River   River   Avail Control       Control
Structure   River                          Demand  Demand Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Exchang   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor
Inflow  Divert by Well Outflow    Flow Location       Right
ID          ID           Year   Mo Day      NA       NA      (+)      (+)      (+)(     (-)      (+)      (+)      (+)(     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA  NA               NA
                                          ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)     (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)           (31)
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Baseflow    ISF.01       1980  SEP   1     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  SEP   2     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  SEP   3     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  SEP   4     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
Baseflow    ISF.01       1980  SEP   5     0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA           -1.000
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Baseflow    ISF.01       1980  SEP   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  SEP  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  SEP  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  SEP  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000

Baseflow    ISF.01       1980  SEP  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
Baseflow    ISF.01       1980  SEP  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   129.9     0.0     0.0     0.0     0.0   129.9
0.0     0.0   129.9     0.0 NA            -1.000
___________ ___________  ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ _______
Baseflow    ISF.01       1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6
0.0     0.0  3897.6     0.0 NA            -1.000


#
# ________________________________________________________________________________
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# *.xre       Reservoir Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 15: 4:56
# Time Step:         Daily
#
# ________________________________________________________________________________

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   1

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  0  100000.; where account 0 is the total
    RESERVOIR OWNER           : Total
    RIVER LOCATION            : Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.

                                                                                                                        From
Storage to                                                              Station Balance
                                                         From River By                 From Carrier By
========================                                        Targt_0    BOM  =======================
                             Initial ================================ =====================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1           0 1979  OCT 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    35.8     0.0
0.0    35.8     0.0     0.0 49964.2100000.0 50000.0  3000.0    35.8     0.0     0.0  3035.8
Res_1           0 1979  NOV 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49964.2100000.0 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1979  DEC 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49964.2100000.0 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  JAN 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49964.2100000.0 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  FEB 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49964.2100000.0 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  MAR 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    25.2     0.0 49939.1100000.0 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  APR 49939.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   327.3     0.0 49611.8100000.0 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           0 1980  MAY 49611.8 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0
0.0     0.0   299.0     0.0 61312.7100000.0 50035.8 15000.0     0.0 12000.0     0.0  3000.0
Res_1           0 1980  JUN 61312.7 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0
0.0     0.0   802.4     0.0 72510.2100000.0 38035.7 15000.0     0.0 12000.0     0.0  3000.0
Res_1           0 1980  JUL 72510.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2420.5     0.0
0.0  2420.5   481.3     0.0 69608.4100000.0 26035.7  3000.0  2420.5     0.0     0.0  5420.5
Res_1           0 1980  AUG 69608.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2427.5     0.0
0.0  2427.5   375.1     0.0 66805.8100000.0 26035.7  3000.0  2427.5     0.0     0.0  5427.5
Res_1           0 1980  SEP 66805.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2299.3     0.0
0.0  2299.3   304.4     0.0 64202.1100000.0 26035.7  3000.0  2299.3     0.0     0.0  5299.3
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           0 1980  TOT 50000.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0 24000.0  7183.1     0.0
0.0  7183.1  2614.9     0.0 64202.1    -1.0    -1.0 60000.0  7183.1 24000.0     0.0 43183.1


   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   2

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  1   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_1
    RIVER LOCATION            : Exist. Reservoir

                                                                                                                        From
Storage to                                                              Station Balance
                                                         From River By                 From Carrier By
========================                                        Targt_0    BOM  =======================
                             Initial ================================ =====================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert
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```
  River River
by Well Outflow
Res_1           1 1979  OCT 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    10.8     0.0
0.0    10.8     0.0     0.0 49964.2 50000.0 50000.0  3000.0    35.8     0.0     0.0  3035.8
Res_1           1 1979  NOV 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1979  DEC 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  JAN 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  FEB 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  MAR 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    25.2     0.0 49939.0 50035.8 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  APR 49939.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   327.3     0.0 49611.7 50061.0 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           1 1980  MAY 49611.7   125.9     0.0     0.0     0.0     0.0     0.0     0.0   125.9     0.0     0.0
0.0     0.0   266.4     0.0 49471.2 50388.3 50035.8 15000.0     0.0 12000.0     0.0  3000.0
Res_1           1 1980  JUN 49471.2   261.3     0.0     0.0     0.0     0.0     0.0     0.0   261.3     0.0     0.0
0.0     0.0   589.8     0.0 49142.7 38687.3 38035.7 15000.0     0.0 12000.0     0.0  3000.0
Res_1           1 1980  JUL 49142.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   331.9     0.0 48810.7 27489.7 26035.7  3000.0  2420.5     0.0     0.0  5420.5
Res_1           1 1980  AUG 48810.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   267.8     0.0 48542.9 30391.6 26035.7  3000.0  2427.5     0.0     0.0  5427.5
Res_1           1 1980  SEP 48542.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   225.2     0.0 48317.7 33194.2 26035.7  3000.0  2299.3     0.0     0.0  5299.3
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  TOT 49975.0   387.2     0.0     0.0     0.0     0.0     0.0     0.0   387.2    10.8     0.0
0.0    10.8  2033.8     0.0 48317.7    -1.0    -1.0 60000.0  7183.1 24000.0     0.0 43183.1

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   3

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  2   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_2
    RIVER LOCATION            : Exist. Reservoir

                                                                                                                        From
Storage to                                                    Station Balance
                                              From River By                 From Carrier By
========================                             Targt_0    BOM  =======================
                             Initial ================================ ======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1           2 1979  OCT    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    25.0     0.0
0.0    25.0     0.0     0.0     0.0 50000.0 50000.0  3000.0    35.8     0.0     0.0  3035.8
Res_1           2 1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 50035.8 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 50035.8 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 50035.8 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 50035.8 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 50035.8 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 50061.0 50035.8  3000.0     0.0     0.0     0.0  3000.0
Res_1           2 1980  MAY     0.0 11874.1     0.0     0.0     0.0     0.0     0.0     0.0 11874.1     0.0     0.0
0.0     0.0    32.5     0.0 11841.5 50388.3 50035.8 15000.0     0.0 12000.0     0.0  3000.0
Res_1           2 1980  JUN 11841.5 11738.7     0.0     0.0     0.0     0.0     0.0     0.0 11738.7     0.0     0.0
0.0     0.0   212.6     0.0 23367.6 38687.3 38035.7 15000.0     0.0 12000.0     0.0  3000.0
Res_1           2 1980  JUL 23367.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2420.5     0.0
0.0  2420.5   149.4     0.0 20797.6 27489.7 26035.7  3000.0  2420.5     0.0     0.0  5420.5
Res_1           2 1980  AUG 20797.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2427.5     0.0
0.0  2427.5   107.2     0.0 18262.9 30391.6 26035.7  3000.0  2427.5     0.0     0.0  5427.5
Res_1           2 1980  SEP 18262.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2299.3     0.0
0.0  2299.3    79.2     0.0 15884.4 33194.2 26035.7  3000.0  2299.3     0.0     0.0  5299.3
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  TOT    25.0 23612.8     0.0     0.0     0.0     0.0     0.0     0.0 23612.8  7172.3     0.0
0.0  7172.3   581.0     0.0 15884.4    -1.0    -1.0 60000.0  7183.1 24000.0     0.0 43183.1
#
# _________________________________________________________________________
# *.xry       Daily Reservior Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
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# Run date:          11/ 2/ 8 15: 4:56
# Time Step:         Daily
#
# ________________________________________________________________________________
```

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#
# ________________________________________________________________________________
# *.xry       Daily Reservior Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version: 12.29.05 Date = 2008/10/23)
# Run date:          11/ 6/ 8 15:48: 5
# Time Step:         Daily
#
# ________________________________________________________________________________
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    Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   1

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  0  100000.; where account 0 is the total
    RESERVOIR OWNER           : Total
    RIVER LOCATION            : Exist. Reservoir


    STRUCTURE DATA            :     #       af
                                _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.



                                                                                                          From
Storage to                                                            Station Balance
                                                    From River by           From Carrier by
_______________________                                    Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________ Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree    River  River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo Day       NA      (+)      (+)      (+)      (-)      (+)      (+)      (-)      NA     (-)      (-
)     (-)      NA     (-)      (-)      NA      NA      NA      (+)      (+)      (-)      (-)      NA
                                   ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________ ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1            0 1979  OCT   1 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    35.8
0.0     0.0    35.8     0.0     0.0 49964.2 99999.0 50000.0    96.8    35.8     0.0     0.0   132.5
Res_1            0 1979  OCT   2 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 99999.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT   3 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT   4 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT   5 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1            0 1979  OCT   6 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT   7 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT   8 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT   9 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  10 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1            0 1979  OCT  11 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  12 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  13 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  14 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  15 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1            0 1979  OCT  16 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  17 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  18 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  19 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  20 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1            0 1979  OCT  21 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  22 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  23 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  24 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1            0 1979  OCT  25 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
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Res_1           0 1979  OCT  26 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1           0 1979  OCT  27 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1           0 1979  OCT  28 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1           0 1979  OCT  29 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1           0 1979  OCT  30 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1           0 1979  OCT  31 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50000.0    96.8     0.0     0.0     0.0    96.8
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           0 1980  TOT  -1 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    35.8
0.0     0.0    35.8     0.0     0.0     0.0    -1.0    -1.0  3000.0    35.8     0.0     0.0  3035.8


                                                                                                            From
Storage to                                                                Station Balance
                                                        From River by          From Carrier by
_______________________                                        Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree    River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo Day      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           0 1979  NOV   1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV   2 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV   3 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV   4 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV   5 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1           0 1979  NOV   6 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV   7 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV   8 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV   9 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  10 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1           0 1979  NOV  11 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  12 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  13 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  14 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  15 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1           0 1979  NOV  16 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  17 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  18 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  19 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  20 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1           0 1979  NOV  21 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  22 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  23 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  24 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           0 1979  NOV  25 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
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Res_1          0 1979  NOV  26 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1979  NOV  27 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1979  NOV  28 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1979  NOV  29 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1979  NOV  30 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
____________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  TOT  -1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                        From
Storage to                                                            Station Balance
                                              From River by          From Carrier by
                                                     Targt_0     BOM _______________________________________
_______________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day       NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
____________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1979  DEC   1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC   2 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC   3 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC   4 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC   5 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1979  DEC   6 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC   7 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC   8 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC   9 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  10 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1979  DEC  11 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  12 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  13 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  14 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  15 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1979  DEC  16 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  17 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  18 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  19 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  20 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1979  DEC  21 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  22 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  23 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  24 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  25 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1979  DEC  26 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  27 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
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Res_1          0 1979  DEC  28 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  29 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1979  DEC  30 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1979  DEC  31 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  TOT  -1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                          From
Storage to                                                            Station Balance
                                                    From River by         From Carrier by
_______________________                                    Targt_0     BOM _______________________________________
                                    Initial _______________________________ _______________________ Total   River
River Carrier   Total              Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                           Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day      NA      (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                       ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  JAN   1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN   2 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN   3 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN   4 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN   5 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1980  JAN   6 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN   7 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN   8 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN   9 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  10 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1980  JAN  11 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  12 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  13 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  14 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  15 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1980  JAN  16 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  17 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  18 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  19 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  20 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1980  JAN  21 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  22 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  23 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  24 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  25 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1980  JAN  26 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  27 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
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Res_1          0 1980  JAN  28 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  29 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  JAN  30 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1980  JAN  31 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
___________ ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  TOT  -1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                       From
Storage to                                                        Station Balance
                                                   From River by            From Carrier by
_______________________                                   Targt_0     BOM _______________________________________
                              Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                     Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo Day      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)     NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                 ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)

___________ ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  FEB   1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB   2 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB   3 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB   4 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB   5 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1          0 1980  FEB   6 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB   7 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB   8 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB   9 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  10 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1          0 1980  FEB  11 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  12 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  13 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  14 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  15 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1          0 1980  FEB  16 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  17 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  18 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  19 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  20 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1          0 1980  FEB  21 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  22 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  23 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  24 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  25 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1          0 1980  FEB  26 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          0 1980  FEB  27 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
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Res_1          0 1980  FEB  28 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2100000.0 50035.8   107.1     0.0     0.0     0.0   107.1
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  TOT  -1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                        From
Storage to                                                         Station Balance
                                                 From River by          From Carrier by
_______________________                                 Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River  River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  MAR   1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49963.4100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR   2 49963.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49962.6100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR   3 49962.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49961.8100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR   4 49961.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49961.0100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR   5 49961.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49960.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1980  MAR   6 49960.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49959.3100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR   7 49959.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49958.5100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR   8 49958.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49957.7100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR   9 49957.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49956.9100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  10 49956.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49956.1100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1980  MAR  11 49956.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49955.3100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  12 49955.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49954.4100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  13 49954.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49953.6100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  14 49953.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49952.8100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  15 49952.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49952.0100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1980  MAR  16 49952.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49951.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  17 49951.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49950.4100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  18 49950.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49949.6100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  19 49949.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49948.7100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  20 49948.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49947.9100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1980  MAR  21 49947.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49947.1100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  22 49947.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49946.3100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  23 49946.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49945.5100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  24 49945.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49944.7100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  25 49944.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49943.9100000.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          0 1980  MAR  26 49943.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49943.0100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  27 49943.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49942.2100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  28 49942.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49941.4100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  29 49941.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49940.6100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          0 1980  MAR  30 49940.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49939.8100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
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Res_1          0 1980  MAR  31 49939.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49939.0100000.0 50035.8    96.8     0.0     0.0     0.0    96.8
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  TOT  -1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                          From
Storage to                                                          Station Balance
                                                      From River by          From Carrier by
_______________________                                      Targt_0     BOM _______________________________________
                               Initial _______________________________ _______________________  Total   River
River Carrier   Total         Seep &     EOM  Stor_n  Decree   River  River   River   River  River
Reservoir                      Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo Day      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                  ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  APR   1 49939.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49928.0100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR   2 49928.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49917.1100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR   3 49917.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49906.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR   4 49906.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49895.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR   5 49895.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49884.3100000.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          0 1980  APR   6 49884.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49873.4100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR   7 49873.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49862.5100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR   8 49862.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49851.5100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR   9 49851.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49840.6100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  10 49840.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49829.7100000.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          0 1980  APR  11 49829.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49818.8100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  12 49818.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49807.8100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  13 49807.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49796.9100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  14 49796.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49786.0100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  15 49786.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49775.1100000.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          0 1980  APR  16 49775.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49764.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  17 49764.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49753.3100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  18 49753.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49742.4100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  19 49742.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49731.5100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  20 49731.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49720.6100000.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          0 1980  APR  21 49720.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49709.7100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  22 49709.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49698.8100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  23 49698.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49687.9100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  24 49687.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49677.0100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  25 49677.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49666.1100000.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          0 1980  APR  26 49666.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49655.2100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  27 49655.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49644.3100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  28 49644.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49633.4100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  29 49633.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49622.6100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          0 1980  APR  30 49622.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49611.7100000.0 50035.8   100.0     0.0     0.0     0.0   100.0
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_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
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Res_1          0 1980  TOT  -1 49939.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                        From
Storage to                                                             Station Balance
                                                 From River by             From Carrier by
_______________________                                 Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &    EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  MAY   1 49611.7   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     8.9     0.0 49989.9100000.0 50035.8   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY   2 49989.9   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.0     0.0 50368.0100000.0 49648.7   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY   3 50368.0   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.0     0.0 50746.1100000.0 49261.6   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY   4 50746.1   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.1     0.0 51124.1100000.0 48874.5   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY   5 51124.1   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.1     0.0 51502.1100000.0 48487.4   483.9     0.0   387.1     0.0    96.8

Res_1          0 1980  MAY   6 51502.1   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.2     0.0 51880.0100000.0 48100.3   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY   7 51880.0   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.2     0.0 52257.8100000.0 47713.2   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY   8 52257.8   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.3     0.0 52635.7100000.0 47326.1   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY   9 52635.7   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.3     0.0 53013.5100000.0 46939.0   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  10 53013.5   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.4     0.0 53391.2100000.0 46551.9   483.9     0.0   387.1     0.0    96.8

Res_1          0 1980  MAY  11 53391.2   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.4     0.0 53768.9100000.0 46164.8   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  12 53768.9   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.5     0.0 54146.5100000.0 45777.7   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  13 54146.5   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.5     0.0 54524.1100000.0 45390.6   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  14 54524.1   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.6     0.0 54901.6100000.0 45003.5   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  15 54901.6   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.6     0.0 55279.1100000.0 44616.4   483.9     0.0   387.1     0.0    96.8

Res_1          0 1980  MAY  16 55279.1   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.6     0.0 55656.6100000.0 44229.3   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  17 55656.6   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.7     0.0 56034.0100000.0 43842.2   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  18 56034.0   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.7     0.0 56411.3100000.0 43455.1   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  19 56411.3   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.8     0.0 56788.6100000.0 43068.0   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  20 56788.6   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.8     0.0 57165.9100000.0 42680.9   483.9     0.0   387.1     0.0    96.8

Res_1          0 1980  MAY  21 57165.9   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.9     0.0 57543.1100000.0 42293.8   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  22 57543.1   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0     9.9     0.0 57920.3100000.0 41906.7   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  23 57920.3   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0    10.0     0.0 58297.4100000.0 41519.6   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  24 58297.4   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0    10.0     0.0 58674.5100000.0 41132.5   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  25 58674.5   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0    10.1     0.0 59051.5100000.0 40745.4   483.9     0.0   387.1     0.0    96.8

Res_1          0 1980  MAY  26 59051.5   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0    10.1     0.0 59428.5100000.0 40358.3   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  27 59428.5   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0    10.2     0.0 59805.4100000.0 39971.2   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  28 59805.4   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0    10.2     0.0 60182.3100000.0 39584.1   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  29 60182.3   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0    10.3     0.0 60559.1100000.0 39197.0   483.9     0.0   387.1     0.0    96.8
Res_1          0 1980  MAY  30 60559.1   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0    10.3     0.0 60935.9100000.0 38809.9   483.9     0.0   387.1     0.0    96.8

Res_1          0 1980  MAY  31 60935.9   387.1     0.0     0.0     0.0     0.0     0.0     0.0   387.1     0.0
0.0     0.0     0.0    10.3     0.0 61312.7100000.0 38422.8   483.9     0.0   387.1     0.0    96.8
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_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
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Res_1          0 1980  TOT  -1 49611.7 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0
0.0     0.0     0.0    10.3     0.0     0.0    -1.0    -1.0 15000.0     0.0 12000.0     0.0  3000.0


                                                                                                          From
Storage to                                                       Station Balance
                                                   From River by          From Carrier by
_______________________                                   Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________   Total   River
River Carrier   Total          Seep &    EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day       NA      (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  JUN   1 61312.7   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    25.3     0.0 61687.4100000.0 38035.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN   2 61687.4   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    25.4     0.0 62061.9100000.0 37635.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN   3 62061.9   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    25.5     0.0 62436.4100000.0 37235.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN   4 62436.4   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    25.6     0.0 62810.8100000.0 36835.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN   5 62810.8   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    25.7     0.0 63185.0100000.0 36435.7   500.0     0.0   400.0     0.0   100.0

Res_1          0 1980  JUN   6 63185.0   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    25.8     0.0 63559.2100000.0 36035.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN   7 63559.2   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    25.9     0.0 63933.3100000.0 35635.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN   8 63933.3   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    26.0     0.0 64307.3100000.0 35235.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN   9 64307.3   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    26.1     0.0 64681.1100000.0 34835.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  10 64681.1   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    26.2     0.0 65054.9100000.0 34435.7   500.0     0.0   400.0     0.0   100.0

Res_1          0 1980  JUN  11 65054.9   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    26.3     0.0 65428.6100000.0 34035.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  12 65428.6   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    26.4     0.0 65802.2100000.0 33635.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  13 65802.2   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    26.5     0.0 66175.7100000.0 33235.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  14 66175.7   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    26.6     0.0 66549.1100000.0 32835.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  15 66549.1   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    26.7     0.0 66922.4100000.0 32435.7   500.0     0.0   400.0     0.0   100.0

Res_1          0 1980  JUN  16 66922.4   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    26.8     0.0 67295.6100000.0 32035.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  17 67295.6   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    26.9     0.0 67668.7100000.0 31635.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  18 67668.7   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    27.0     0.0 68041.7100000.0 31235.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  19 68041.7   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    27.1     0.0 68414.6100000.0 30835.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  20 68414.6   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    27.2     0.0 68787.4100000.0 30435.7   500.0     0.0   400.0     0.0   100.0

Res_1          0 1980  JUN  21 68787.4   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    27.3     0.0 69160.1100000.0 30035.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  22 69160.1   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    27.4     0.0 69532.7100000.0 29635.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  23 69532.7   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    27.5     0.0 69905.2100000.0 29235.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  24 69905.2   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    27.6     0.0 70277.6100000.0 28835.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  25 70277.6   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    27.7     0.0 70649.9100000.0 28435.7   500.0     0.0   400.0     0.0   100.0

Res_1          0 1980  JUN  26 70649.9   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    27.8     0.0 71022.2100000.0 28035.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  27 71022.2   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    27.8     0.0 71394.3100000.0 27635.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  28 71394.3   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    27.9     0.0 71766.4100000.0 27235.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  29 71766.4   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    28.0     0.0 72138.4100000.0 26835.7   500.0     0.0   400.0     0.0   100.0
Res_1          0 1980  JUN  30 72138.4   400.0     0.0     0.0     0.0     0.0     0.0     0.0   400.0     0.0
0.0     0.0     0.0    28.1     0.0 72510.3100000.0 26435.7   500.0     0.0   400.0     0.0   100.0
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  TOT  -1 61312.7 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0
0.0     0.0     0.0    28.1     0.0     0.0    -1.0    -1.0 15000.0     0.0 12000.0     0.0  3000.0
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                                                                                                                                        From
Storage to                                                                          Station Balance
                                                                  From River by            From Carrier by
_______________________                                                  Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________ Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo Day      NA      (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______

Res_1          0 1980  JUL   1 72510.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    72.0
0.0     0.0    72.0    15.7     0.0 72422.5100000.0 26035.7    96.8    72.0     0.0     0.0   168.8
Res_1          0 1980  JUL   2 72422.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    77.8
0.0     0.0    77.8    15.7     0.0 72329.0100000.0 26035.7    96.8    77.8     0.0     0.0   174.6
Res_1          0 1980  JUL   3 72329.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.1
0.0     0.0    78.1    15.7     0.0 72235.2100000.0 26035.7    96.8    78.1     0.0     0.0   174.9
Res_1          0 1980  JUL   4 72235.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.7     0.0 72141.2100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL   5 72141.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.7     0.0 72047.2100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  JUL   6 72047.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.7     0.0 71953.3100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL   7 71953.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.6     0.0 71859.3100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL   8 71859.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.6     0.0 71765.4100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL   9 71765.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.6     0.0 71671.5100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  10 71671.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.6     0.0 71577.6100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  JUL  11 71577.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.6     0.0 71483.7100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  12 71483.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.6     0.0 71389.8100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  13 71389.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.6     0.0 71295.9100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  14 71295.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.6     0.0 71202.0100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  15 71202.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.5     0.0 71108.2100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  JUL  16 71108.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.5     0.0 71014.4100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  17 71014.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.5     0.0 70920.5100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  18 70920.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.5     0.0 70826.7100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  19 70826.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.5     0.0 70732.9100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  20 70732.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.5     0.0 70639.2100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  JUL  21 70639.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.5     0.0 70545.4100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  22 70545.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.5     0.0 70451.6100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  23 70451.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.4     0.0 70357.9100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  24 70357.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.4     0.0 70264.1100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  25 70264.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.4     0.0 70170.4100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  JUL  26 70170.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.4     0.0 70076.7100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  27 70076.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.4     0.0 69983.0100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  28 69983.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.4     0.0 69889.3100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  29 69889.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.4     0.0 69795.7100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  JUL  30 69795.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.3     0.0 69702.0100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  JUL  31 69702.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    15.3     0.0 69608.4100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______

Res_1          0 1980  TOT  -1 72510.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2420.5
0.0     0.0  2420.5    15.3     0.0     0.0    -1.0    -1.0  3000.0  2420.5     0.0     0.0  5420.5
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                                                                                                              From
Storage to                                                            Station Balance
                                                    From River by           From Carrier by
_______________________                                    Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________ Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River  River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day        NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)       NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  AUG   1 69608.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.3     0.0 69517.8100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG   2 69517.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.2     0.0 69427.3100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG   3 69427.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.2     0.0 69336.7100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG   4 69336.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.2     0.0 69246.2100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG   5 69246.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.2     0.0 69155.7100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  AUG   6 69155.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.2     0.0 69065.1100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG   7 69065.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.2     0.0 68974.6100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG   8 68974.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.2     0.0 68884.2100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG   9 68884.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.2     0.0 68793.7100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  10 68793.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.2     0.0 68703.2100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  AUG  11 68703.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.2     0.0 68612.8100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  12 68612.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.1     0.0 68522.3100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  13 68522.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.1     0.0 68431.9100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  14 68431.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.1     0.0 68341.4100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  15 68341.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.1     0.0 68251.0100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  AUG  16 68251.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.1     0.0 68160.6100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  17 68160.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.1     0.0 68070.2100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  18 68070.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.1     0.0 67979.8100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  19 67979.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.1     0.0 67889.5100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  20 67889.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.1     0.0 67799.1100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  AUG  21 67799.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.0     0.0 67708.7100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  22 67708.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.0     0.0 67618.4100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  23 67618.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.0     0.0 67528.1100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  24 67528.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.0     0.0 67437.7100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  25 67437.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.0     0.0 67347.4100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  AUG  26 67347.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.0     0.0 67257.1100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  27 67257.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.0     0.0 67166.8100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  28 67166.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.0     0.0 67076.6100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  29 67076.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.0     0.0 66986.3100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1          0 1980  AUG  30 66986.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    12.0     0.0 66896.0100000.0 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1          0 1980  AUG  31 66896.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3    11.9     0.0 66805.8100000.0 26035.7    96.8    78.3     0.0     0.0   175.1
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          0 1980  TOT  -1 69608.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2427.5
0.0     0.0  2427.5    11.9     0.0     0.0    -1.0    -1.0  3000.0  2427.5     0.0     0.0  5427.5
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                                                                                                                        From
Storage to                                                                    Station Balance
                                                  From River by           From Carrier by
_______________________                                  Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________ Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day       NA      (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1            0 1980  SEP   1 66805.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    77.6
0.0     0.0    77.6    10.3     0.0 66717.9100000.0 26035.7   100.0    77.6     0.0     0.0   177.6
Res_1            0 1980  SEP   2 66717.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    77.1
0.0     0.0    77.1    10.3     0.0 66630.5100000.0 26035.7   100.0    77.1     0.0     0.0   177.1
Res_1            0 1980  SEP   3 66630.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.8
0.0     0.0    76.8    10.3     0.0 66543.5100000.0 26035.7   100.0    76.8     0.0     0.0   176.8
Res_1            0 1980  SEP   4 66543.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 66456.7100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP   5 66456.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 66369.9100000.0 26035.7   100.0    76.6     0.0     0.0   176.6

Res_1            0 1980  SEP   6 66369.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 66283.0100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP   7 66283.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 66196.2100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP   8 66196.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 66109.4100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP   9 66109.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 66022.6100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  10 66022.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 65935.9100000.0 26035.7   100.0    76.6     0.0     0.0   176.6

Res_1            0 1980  SEP  11 65935.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 65849.1100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  12 65849.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 65762.3100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  13 65762.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 65675.6100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  14 65675.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 65588.8100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  15 65588.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.2     0.0 65502.1100000.0 26035.7   100.0    76.6     0.0     0.0   176.6

Res_1            0 1980  SEP  16 65502.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.1     0.0 65415.4100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  17 65415.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.1     0.0 65328.6100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  18 65328.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.1     0.0 65241.9100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  19 65241.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.1     0.0 65155.2100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  20 65155.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.1     0.0 65068.5100000.0 26035.7   100.0    76.6     0.0     0.0   176.6

Res_1            0 1980  SEP  21 65068.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.1     0.0 64981.9100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  22 64981.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.1     0.0 64895.2100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  23 64895.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.1     0.0 64808.5100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  24 64808.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.1     0.0 64721.9100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  25 64721.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.1     0.0 64635.2100000.0 26035.7   100.0    76.6     0.0     0.0   176.6

Res_1            0 1980  SEP  26 64635.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.1     0.0 64548.6100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  27 64548.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.0     0.0 64461.9100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  28 64461.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.0     0.0 64375.3100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  29 64375.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.0     0.0 64288.7100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1            0 1980  SEP  30 64288.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6    10.0     0.0 64202.1100000.0 26035.7   100.0    76.6     0.0     0.0   176.6
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1            0 1980  TOT  -1 66805.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2299.3
0.0     0.0  2299.3    10.0     0.0     0.0    -1.0    -1.0  3000.0  2299.3     0.0     0.0  5299.3
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    Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex3.* data set
PAGE NO.   2

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  1   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_1
    RIVER LOCATION            : Exist. Reservoir


                                                                                                                        From
Storage to                                                                     Station Balance
                                                          From River by            From Carrier by
_______________________                                          Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________ Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day       NA      (+)      (+)      (+)      (-)      (+)      (+)      (-)       NA      (-)      (-
)     (-)      NA      (-)      (-)      NA       NA       NA      (+)      (+)      (-)      (-)      NA
                                   ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)     (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          1 1979  OCT   1 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    10.8
0.0     0.0    10.8     0.0     0.0 49964.2 50000.0 50000.0    96.8    35.8     0.0     0.0   132.5
Res_1          1 1979  OCT   2 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT   3 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT   4 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT   5 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1          1 1979  OCT   6 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT   7 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT   8 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT   9 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  10 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1          1 1979  OCT  11 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  12 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  13 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  14 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  15 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1          1 1979  OCT  16 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  17 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  18 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  19 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  20 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1          1 1979  OCT  21 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  22 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  23 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  24 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  25 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1          1 1979  OCT  26 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  27 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  28 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
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Res_1          1 1979  OCT  29 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          1 1979  OCT  30 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1          1 1979  OCT  31 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          1 1980  TOT  -1 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    10.8
0.0     0.0    10.8     0.0     0.0     0.0    -1.0    -1.0  3000.0    35.8     0.0     0.0  3035.8


                                                                                                       From
Storage to                                                      Station Balance
                                             From River by           From Carrier by
_______________________                                 Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________   Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River  River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo Day       NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                       ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          1 1979  NOV   1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV   2 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV   3 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV   4 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV   5 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          1 1979  NOV   6 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV   7 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV   8 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV   9 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  10 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          1 1979  NOV  11 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  12 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  13 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  14 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  15 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          1 1979  NOV  16 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  17 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  18 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  19 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  20 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          1 1979  NOV  21 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  22 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  23 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  24 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  25 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          1 1979  NOV  26 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  27 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          1 1979  NOV  28 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
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Res_1           1 1979  NOV  29 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           1 1979  NOV  30 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  TOT  -1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                          From
Storage to                                                           Station Balance
                                                  From River by             From Carrier by
                                                         Targt_0     BOM _______________________________________
_______________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree    River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day       NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1979  DEC   1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC   2 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC   3 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC   4 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC   5 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1979  DEC   6 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC   7 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC   8 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC   9 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  10 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1979  DEC  11 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  12 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  13 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  14 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  15 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1979  DEC  16 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  17 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  18 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  19 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  20 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1979  DEC  21 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  22 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  23 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  24 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  25 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1979  DEC  26 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  27 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  28 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  29 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1979  DEC  30 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
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Res_1           1 1979  DEC  31 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
____________  _____ _____ _____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  TOT  -1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                           From
Storage to                                                            Station Balance
                                                        From River by          From Carrier by
_______________________                                        Targt_0     BOM _______________________________
                                Initial _______________________________ _______________________ Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree    River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
____________  _____ _____ _____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  JAN   1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN   2 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN   3 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN   4 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN   5 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1980  JAN   6 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN   7 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN   8 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN   9 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  10 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1980  JAN  11 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  12 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  13 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  14 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  15 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1980  JAN  16 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  17 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  18 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  19 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  20 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1980  JAN  21 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  22 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  23 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  24 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  25 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1980  JAN  26 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  27 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  28 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  29 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  JAN  30 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
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Res_1          1 1980  JAN  31 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          1 1980  TOT  -1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                        From
Storage to                                                        Station Balance
                                                    From River by          From Carrier by
_______________________                                    Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &    EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day      NA      (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          1 1980  FEB   1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB   2 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB   3 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB   4 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB   5 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1          1 1980  FEB   6 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB   7 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB   8 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB   9 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  10 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1          1 1980  FEB  11 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  12 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  13 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  14 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  15 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1          1 1980  FEB  16 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  17 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  18 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  19 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  20 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1          1 1980  FEB  21 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  22 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  23 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  24 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  25 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1          1 1980  FEB  26 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  27 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1          1 1980  FEB  28 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0 49964.2 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          1 1980  TOT  -1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0
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                                                                                                                                                    From
Storage to                                                                                        Station Balance
                                                                            From River by                  From Carrier by
_______________________                                                              Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________ Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo Day       NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  MAR   1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49963.4 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR   2 49963.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49962.6 50036.6 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR   3 49962.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49961.8 50037.4 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR   4 49961.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49961.0 50038.2 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR   5 49961.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49960.2 50039.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1980  MAR   6 49960.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49959.3 50039.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR   7 49959.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49958.5 50040.7 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR   8 49958.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49957.7 50041.5 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR   9 49957.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49956.9 50042.3 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  10 49956.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49956.1 50043.1 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1980  MAR  11 49956.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49955.3 50043.9 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  12 49955.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49954.4 50044.7 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  13 49954.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49953.6 50045.6 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  14 49953.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49952.8 50046.4 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  15 49952.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49952.0 50047.2 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1980  MAR  16 49952.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49951.2 50048.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  17 49951.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49950.4 50048.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  18 49950.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49949.6 50049.6 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  19 49949.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49948.7 50050.4 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  20 49948.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49947.9 50051.3 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1980  MAR  21 49947.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49947.1 50052.1 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  22 49947.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49946.3 50052.9 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  23 49946.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49945.5 50053.7 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  24 49945.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49944.7 50054.5 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  25 49944.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49943.9 50055.3 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1980  MAR  26 49943.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49943.0 50056.1 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  27 49943.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49942.2 50057.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  28 49942.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49941.4 50057.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  29 49941.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49940.6 50058.6 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1           1 1980  MAR  30 49940.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49939.8 50059.4 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1           1 1980  MAR  31 49939.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0 49939.0 50060.2 50035.8    96.8     0.0     0.0     0.0    96.8
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  TOT  -1 49964.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.8     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0
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                                                                                                                                       From
Storage to                                                                                  Station Balance
                                                                   From River by            From Carrier by
_______________________                                                    Targt_0     BOM _______________________________________
                                Initial _______________________________ ______________________ Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID              Acc Year   Mo Day       NA      (+)      (+)      (+)      (-)      (+)      (+)      (-)       NA      (-)      (-
)     (-)      NA      (-)      (-)       NA       NA       NA      (+)      (+)      (-)      (-)       NA
                                   ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)     (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1            1 1980  APR   1 49939.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49928.0 50061.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR   2 49928.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49917.1 50072.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR   3 49917.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49906.2 50082.9 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR   4 49906.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49895.2 50093.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR   5 49895.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49884.3 50104.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1            1 1980  APR   6 49884.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49873.4 50115.7 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR   7 49873.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49862.5 50126.6 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR   8 49862.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49851.5 50137.5 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR   9 49851.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49840.6 50148.5 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  10 49840.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49829.7 50159.4 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1            1 1980  APR  11 49829.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49818.8 50170.3 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  12 49818.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49807.8 50181.2 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  13 49807.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49796.9 50192.2 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  14 49796.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49786.0 50203.1 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  15 49786.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49775.1 50214.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1            1 1980  APR  16 49775.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49764.2 50224.9 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  17 49764.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49753.3 50235.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  18 49753.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49742.4 50246.7 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  19 49742.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49731.5 50257.6 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  20 49731.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49720.6 50268.5 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1            1 1980  APR  21 49720.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49709.7 50279.4 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  22 49709.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49698.8 50290.3 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  23 49698.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49687.9 50301.2 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  24 49687.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49677.0 50312.1 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  25 49677.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49666.1 50323.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1            1 1980  APR  26 49666.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49655.2 50333.9 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  27 49655.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49644.3 50344.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  28 49644.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49633.4 50355.7 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  29 49633.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49622.6 50366.6 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1            1 1980  APR  30 49622.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0 49611.7 50377.4 50035.8   100.0     0.0     0.0     0.0   100.0
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1            1 1980  TOT  -1 49939.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.9     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0

                                                                                                                                       From
Storage to                                                                                  Station Balance
                                                                   From River by            From Carrier by
_______________________                                                    Targt_0     BOM _______________________________________
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                                Initial ______________________________ _______________________ Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day      NA      (+)      (+)      (+)      (-)      (+)      (+)      (-)      NA      (-)      (-
)      (-)      NA      (-)      (-)      NA      NA      NA      (+)      (+)      (-)      (-)      NA
                                   ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)     (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________ _____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  MAY   1 49611.7     3.0     0.0     0.0     0.0     0.0     0.0     3.0     0.0     0.0
0.0     0.0     0.0     8.9     0.0 49605.8 50388.3 50035.8   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY   2 49605.8     3.1     0.0     0.0     0.0     0.0     0.0     3.1     0.0     0.0
0.0     0.0     0.0     8.9     0.0 49600.0 50010.1 49648.7   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY   3 49600.0     3.1     0.0     0.0     0.0     0.0     0.0     3.1     0.0     0.0
0.0     0.0     0.0     8.8     0.0 49594.3 49632.0 49261.6   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY   4 49594.3     3.2     0.0     0.0     0.0     0.0     0.0     3.2     0.0     0.0
0.0     0.0     0.0     8.8     0.0 49588.7 49253.9 48874.5   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY   5 49588.7     3.3     0.0     0.0     0.0     0.0     0.0     3.3     0.0     0.0
0.0     0.0     0.0     8.8     0.0 49583.1 48875.9 48487.4   483.9     0.0   387.1     0.0    96.8

Res_1           1 1980  MAY   6 49583.1     3.3     0.0     0.0     0.0     0.0     0.0     3.3     0.0     0.0
0.0     0.0     0.0     8.8     0.0 49577.7 48497.9 48100.3   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY   7 49577.7     3.4     0.0     0.0     0.0     0.0     0.0     3.4     0.0     0.0
0.0     0.0     0.0     8.8     0.0 49572.3 48120.0 47713.2   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY   8 49572.3     3.5     0.0     0.0     0.0     0.0     0.0     3.5     0.0     0.0
0.0     0.0     0.0     8.7     0.0 49567.1 47742.2 47326.1   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY   9 49567.1     3.5     0.0     0.0     0.0     0.0     0.0     3.5     0.0     0.0
0.0     0.0     0.0     8.7     0.0 49561.9 47364.3 46939.0   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  10 49561.9     3.6     0.0     0.0     0.0     0.0     0.0     3.6     0.0     0.0
0.0     0.0     0.0     8.7     0.0 49556.8 46986.5 46551.9   483.9     0.0   387.1     0.0    96.8

Res_1           1 1980  MAY  11 49556.8     3.7     0.0     0.0     0.0     0.0     0.0     3.7     0.0     0.0
0.0     0.0     0.0     8.7     0.0 49551.8 46608.8 46164.8   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  12 49551.8     3.8     0.0     0.0     0.0     0.0     0.0     3.8     0.0     0.0
0.0     0.0     0.0     8.7     0.0 49546.9 46231.1 45777.7   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  13 49546.9     3.8     0.0     0.0     0.0     0.0     0.0     3.8     0.0     0.0
0.0     0.0     0.0     8.6     0.0 49542.1 45853.5 45390.6   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  14 49542.1     3.9     0.0     0.0     0.0     0.0     0.0     3.9     0.0     0.0
0.0     0.0     0.0     8.6     0.0 49537.4 45475.9 45003.5   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  15 49537.4     4.0     0.0     0.0     0.0     0.0     0.0     4.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 49532.8 45098.4 44616.4   483.9     0.0   387.1     0.0    96.8

Res_1           1 1980  MAY  16 49532.8     4.0     0.0     0.0     0.0     0.0     0.0     4.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 49528.2 44720.9 44229.3   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  17 49528.2     4.1     0.0     0.0     0.0     0.0     0.0     4.1     0.0     0.0
0.0     0.0     0.0     8.6     0.0 49523.8 44343.4 43842.2   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  18 49523.8     4.2     0.0     0.0     0.0     0.0     0.0     4.2     0.0     0.0
0.0     0.0     0.0     8.6     0.0 49519.4 43966.0 43455.1   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  19 49519.4     4.3     0.0     0.0     0.0     0.0     0.0     4.3     0.0     0.0
0.0     0.0     0.0     8.5     0.0 49515.1 43588.7 43068.0   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  20 49515.1     4.3     0.0     0.0     0.0     0.0     0.0     4.3     0.0     0.0
0.0     0.0     0.0     8.5     0.0 49511.0 43211.4 42680.9   483.9     0.0   387.1     0.0    96.8

Res_1           1 1980  MAY  21 49511.0     4.4     0.0     0.0     0.0     0.0     0.0     4.4     0.0     0.0
0.0     0.0     0.0     8.5     0.0 49506.9 42834.1 42293.8   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  22 49506.9     4.5     0.0     0.0     0.0     0.0     0.0     4.5     0.0     0.0
0.0     0.0     0.0     8.5     0.0 49502.9 42456.9 41906.7   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  23 49502.9     4.6     0.0     0.0     0.0     0.0     0.0     4.6     0.0     0.0
0.0     0.0     0.0     8.5     0.0 49499.0 42079.7 41519.6   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  24 49499.0     4.7     0.0     0.0     0.0     0.0     0.0     4.7     0.0     0.0
0.0     0.0     0.0     8.5     0.0 49495.2 41702.6 41132.5   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  25 49495.2     4.7     0.0     0.0     0.0     0.0     0.0     4.7     0.0     0.0
0.0     0.0     0.0     8.4     0.0 49491.5 41325.5 40745.4   483.9     0.0   387.1     0.0    96.8

Res_1           1 1980  MAY  26 49491.5     4.8     0.0     0.0     0.0     0.0     0.0     4.8     0.0     0.0
0.0     0.0     0.0     8.4     0.0 49487.8 40948.5 40358.3   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  27 49487.8     4.9     0.0     0.0     0.0     0.0     0.0     4.9     0.0     0.0
0.0     0.0     0.0     8.4     0.0 49484.3 40571.5 39971.2   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  28 49484.3     5.0     0.0     0.0     0.0     0.0     0.0     5.0     0.0     0.0
0.0     0.0     0.0     8.4     0.0 49480.9 40194.6 39584.1   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  29 49480.9     5.0     0.0     0.0     0.0     0.0     0.0     5.0     0.0     0.0
0.0     0.0     0.0     8.4     0.0 49477.6 39817.7 39197.0   483.9     0.0   387.1     0.0    96.8
Res_1           1 1980  MAY  30 49477.6     5.1     0.0     0.0     0.0     0.0     0.0     5.1     0.0     0.0
0.0     0.0     0.0     8.4     0.0 49474.3 39440.9 38809.9   483.9     0.0   387.1     0.0    96.8

Res_1           1 1980  MAY  31 49474.3     5.2     0.0     0.0     0.0     0.0     0.0     5.2     0.0     0.0
0.0     0.0     0.0     8.3     0.0 49471.2 39064.1 38422.8   483.9     0.0   387.1     0.0    96.8
___________ _____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  TOT  -1 49611.7   125.9     0.0     0.0     0.0     0.0     0.0   125.9     0.0     0.0
0.0     0.0     0.0     8.3     0.0     0.0    -1.0    -1.0 15000.0     0.0 12000.0     0.0  3000.0


                                                                                                           From
Storage to                                                          Station Balance
                                                  From River by           From Carrier by
_______________________                                  Targt_0     BOM ________________________________________
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                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day       NA      (+)      (+)      (+)      (-)      (+)      (+)      (-)      NA      (-)      (-
)      (-)      NA      (-)      (-)      NA      NA      NA      (+)      (+)      (-)      (-)      NA
                                   ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)     (10)
(11)     (12)     (13)     (14)     (15)     (16)     (17)     (18)     (19)     (20)     (21)     (22)     (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  JUN   1 49471.2     5.5     0.0     0.0     0.0     0.0     0.0     5.5     0.0     0.0
0.0     0.0     0.0    20.3     0.0 49456.4 38687.3 38035.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN   2 49456.4     5.7     0.0     0.0     0.0     0.0     0.0     5.7     0.0     0.0
0.0     0.0     0.0    20.3     0.0 49441.8 38312.6 37635.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN   3 49441.8     5.9     0.0     0.0     0.0     0.0     0.0     5.9     0.0     0.0
0.0     0.0     0.0    20.2     0.0 49427.4 37938.1 37235.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN   4 49427.4     6.1     0.0     0.0     0.0     0.0     0.0     6.1     0.0     0.0
0.0     0.0     0.0    20.2     0.0 49413.4 37563.6 36835.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN   5 49413.4     6.3     0.0     0.0     0.0     0.0     0.0     6.3     0.0     0.0
0.0     0.0     0.0    20.1     0.0 49399.6 37189.2 36435.7   500.0     0.0   400.0     0.0   100.0

Res_1           1 1980  JUN   6 49399.6     6.5     0.0     0.0     0.0     0.0     0.0     6.5     0.0     0.0
0.0     0.0     0.0    20.1     0.0 49386.0 36815.0 36035.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN   7 49386.0     6.7     0.0     0.0     0.0     0.0     0.0     6.7     0.0     0.0
0.0     0.0     0.0    20.0     0.0 49372.7 36440.8 35635.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN   8 49372.7     7.0     0.0     0.0     0.0     0.0     0.0     7.0     0.0     0.0
0.0     0.0     0.0    20.0     0.0 49359.7 36066.7 35235.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN   9 49359.7     7.2     0.0     0.0     0.0     0.0     0.0     7.2     0.0     0.0
0.0     0.0     0.0    19.9     0.0 49347.0 35692.7 34835.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  10 49347.0     7.4     0.0     0.0     0.0     0.0     0.0     7.4     0.0     0.0
0.0     0.0     0.0    19.9     0.0 49334.5 35318.9 34435.7   500.0     0.0   400.0     0.0   100.0

Res_1           1 1980  JUN  11 49334.5     7.6     0.0     0.0     0.0     0.0     0.0     7.6     0.0     0.0
0.0     0.0     0.0    19.8     0.0 49322.3 34945.1 34035.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  12 49322.3     7.8     0.0     0.0     0.0     0.0     0.0     7.8     0.0     0.0
0.0     0.0     0.0    19.8     0.0 49310.3 34571.4 33635.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  13 49310.3     8.1     0.0     0.0     0.0     0.0     0.0     8.1     0.0     0.0
0.0     0.0     0.0    19.8     0.0 49298.6 34197.8 33235.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  14 49298.6     8.3     0.0     0.0     0.0     0.0     0.0     8.3     0.0     0.0
0.0     0.0     0.0    19.7     0.0 49287.2 33824.3 32835.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  15 49287.2     8.5     0.0     0.0     0.0     0.0     0.0     8.5     0.0     0.0
0.0     0.0     0.0    19.7     0.0 49276.1 33450.9 32435.7   500.0     0.0   400.0     0.0   100.0

Res_1           1 1980  JUN  16 49276.1     8.8     0.0     0.0     0.0     0.0     0.0     8.8     0.0     0.0
0.0     0.0     0.0    19.6     0.0 49265.2 33077.6 32035.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  17 49265.2     9.0     0.0     0.0     0.0     0.0     0.0     9.0     0.0     0.0
0.0     0.0     0.0    19.6     0.0 49254.6 32704.4 31635.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  18 49254.6     9.2     0.0     0.0     0.0     0.0     0.0     9.2     0.0     0.0
0.0     0.0     0.0    19.5     0.0 49244.3 32331.3 31235.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  19 49244.3     9.5     0.0     0.0     0.0     0.0     0.0     9.5     0.0     0.0
0.0     0.0     0.0    19.5     0.0 49234.2 31958.3 30835.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  20 49234.2     9.7     0.0     0.0     0.0     0.0     0.0     9.7     0.0     0.0
0.0     0.0     0.0    19.5     0.0 49224.5 31585.4 30435.7   500.0     0.0   400.0     0.0   100.0

Res_1           1 1980  JUN  21 49224.5     9.9     0.0     0.0     0.0     0.0     0.0     9.9     0.0     0.0
0.0     0.0     0.0    19.4     0.0 49215.0 31212.6 30035.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  22 49215.0    10.2     0.0     0.0     0.0     0.0     0.0    10.2     0.0     0.0
0.0     0.0     0.0    19.4     0.0 49205.8 30839.9 29635.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  23 49205.8    10.4     0.0     0.0     0.0     0.0     0.0    10.4     0.0     0.0
0.0     0.0     0.0    19.3     0.0 49196.9 30467.3 29235.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  24 49196.9    10.7     0.0     0.0     0.0     0.0     0.0    10.7     0.0     0.0
0.0     0.0     0.0    19.3     0.0 49188.3 30094.8 28835.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  25 49188.3    10.9     0.0     0.0     0.0     0.0     0.0    10.9     0.0     0.0
0.0     0.0     0.0    19.3     0.0 49179.9 29722.4 28435.7   500.0     0.0   400.0     0.0   100.0

Res_1           1 1980  JUN  26 49179.9    11.2     0.0     0.0     0.0     0.0     0.0    11.2     0.0     0.0
0.0     0.0     0.0    19.2     0.0 49171.9 29350.1 28035.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  27 49171.9    11.4     0.0     0.0     0.0     0.0     0.0    11.4     0.0     0.0
0.0     0.0     0.0    19.2     0.0 49164.1 28977.8 27635.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  28 49164.1    11.7     0.0     0.0     0.0     0.0     0.0    11.7     0.0     0.0
0.0     0.0     0.0    19.1     0.0 49156.7 28605.7 27235.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  29 49156.7    11.9     0.0     0.0     0.0     0.0     0.0    11.9     0.0     0.0
0.0     0.0     0.0    19.1     0.0 49149.5 28233.6 26835.7   500.0     0.0   400.0     0.0   100.0
Res_1           1 1980  JUN  30 49149.5    12.2     0.0     0.0     0.0     0.0     0.0    12.2     0.0     0.0
0.0     0.0     0.0    19.1     0.0 49142.7 27861.6 26435.7   500.0     0.0   400.0     0.0   100.0
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  TOT  -1 49471.2   261.3     0.0     0.0     0.0     0.0     0.0   261.3     0.0     0.0
0.0     0.0     0.0    19.1     0.0     0.0    -1.0    -1.0 15000.0     0.0 12000.0     0.0  3000.0


                                                                                                          From
Storage to                                                                  Station Balance
                                                          From River by          From Carrier by
_______________________                                          Targt_0      BOM _______________________________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
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ID            Acc Year   Mo Day      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                       ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  JUL   1 49142.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49132.0 27489.7 26035.7    96.8    72.0     0.0     0.0   168.8
Res_1           1 1980  JUL   2 49132.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49121.4 27577.5 26035.7    96.8    77.8     0.0     0.0   174.6
Res_1           1 1980  JUL   3 49121.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49110.7 27671.0 26035.7    96.8    78.1     0.0     0.0   174.9
Res_1           1 1980  JUL   4 49110.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49100.0 27764.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL   5 49100.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49089.4 27858.8 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  JUL   6 49089.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49078.7 27952.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL   7 49078.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49068.0 28046.7 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL   8 49068.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49057.3 28140.7 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL   9 49057.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49046.6 28234.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  10 49046.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49035.9 28328.5 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  JUL  11 49035.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49025.2 28422.4 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  12 49025.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49014.6 28516.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  13 49014.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 49003.9 28610.2 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  14 49003.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48993.2 28704.1 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  15 48993.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48982.4 28797.9 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  JUL  16 48982.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48971.7 28891.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  17 48971.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48961.0 28985.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  18 48961.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48950.3 29079.5 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  19 48950.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48939.6 29173.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  20 48939.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48928.9 29267.1 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  JUL  21 48928.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48918.2 29360.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  22 48918.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48907.4 29454.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  23 48907.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48896.7 29548.4 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  24 48896.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48886.0 29642.1 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  25 48886.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48875.2 29735.9 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  JUL  26 48875.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48864.5 29829.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  27 48864.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48853.7 29923.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  28 48853.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48843.0 30017.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  29 48843.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.7     0.0 48832.2 30110.7 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  JUL  30 48832.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.8     0.0 48821.5 30204.3 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  JUL  31 48821.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.8     0.0 48810.7 30298.0 26035.7    96.8    78.3     0.0     0.0   175.1
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  TOT  -1 49142.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0    10.8     0.0     0.0    -1.0    -1.0  3000.0  2420.5     0.0     0.0  5420.5


                                                                                                          From
Storage to                                                        Station Balance
                                                    From River by          From Carrier by
_______________________                                    Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree    River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
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ID            Acc Year   Mo Day      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                           ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)

___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______

Res_1           1 1980  AUG   1 48810.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48802.1 30391.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG   2 48802.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48793.5 30482.2 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG   3 48793.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48784.9 30572.7 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG   4 48784.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48776.3 30663.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG   5 48776.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48767.7 30753.8 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  AUG   6 48767.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48759.1 30844.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG   7 48759.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48750.5 30934.9 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG   8 48750.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48741.8 31025.4 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG   9 48741.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48733.2 31115.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  10 48733.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48724.6 31206.3 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  AUG  11 48724.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48716.0 31296.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  12 48716.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48707.3 31387.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  13 48707.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48698.7 31477.7 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  14 48698.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48690.1 31568.1 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  15 48690.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48681.4 31658.6 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  AUG  16 48681.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48672.8 31749.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  17 48672.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48664.1 31839.4 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  18 48664.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48655.5 31929.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  19 48655.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48646.9 32020.2 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  20 48646.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.6     0.0 48638.2 32110.5 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  AUG  21 48638.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0 48629.6 32200.9 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  22 48629.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0 48620.9 32291.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  23 48620.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0 48612.2 32381.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  24 48612.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0 48603.6 32471.9 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  25 48603.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0 48594.9 32562.3 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  AUG  26 48594.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0 48586.3 32652.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  27 48586.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0 48577.6 32742.9 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  28 48577.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0 48568.9 32833.2 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  29 48568.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0 48560.2 32923.4 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           1 1980  AUG  30 48560.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0 48551.6 33013.7 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           1 1980  AUG  31 48551.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0 48542.9 33104.0 26035.7    96.8    78.3     0.0     0.0   175.1
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______

Res_1           1 1980  TOT  -1 48810.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     8.7     0.0     0.0    -1.0    -1.0  3000.0  2427.5     0.0     0.0  5427.5


                                                                                                            From
Storage to                                                        Station Balance
                                                    From River by         From Carrier by
________________________                                   Targt_0     BOM ________________________________________
                                Initial ________________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree    River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
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ID	Acc	Year	Mo	Day	NA (1)	(+) (2)	(+) (3)	(+) (4)	(-) (5)	(+) (6)	(+) (7)	(-) (8)	NA (9)	(-) (10)	(-) (11)	(-) (12)	NA (13)	(-) (14)	(-) (15)	NA (16)	NA (17)	NA (18)	(+) (19)	(+) (20)	(-) (21)	(-) (22)	NA (23)
Res_1	1	1980	SEP	1	48542.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48535.4	33194.2	26035.7	100.0	77.6	0.0	0.0	177.6
Res_1	1	1980	SEP	2	48535.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48527.9	33282.1	26035.7	100.0	77.1	0.0	0.0	177.1
Res_1	1	1980	SEP	3	48527.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48520.5	33369.5	26035.7	100.0	76.8	0.0	0.0	176.8
Res_1	1	1980	SEP	4	48520.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48513.0	33456.5	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	5	48513.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48505.5	33543.3	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	6	48505.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48498.0	33630.1	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	7	48498.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48490.5	33717.0	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	8	48490.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48483.0	33803.8	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	9	48483.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48475.6	33890.6	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	10	48475.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48468.1	33977.4	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	11	48468.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48460.6	34064.1	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	12	48460.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48453.1	34150.9	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	13	48453.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48445.6	34237.7	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	14	48445.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48438.1	34324.4	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	15	48438.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48430.6	34411.2	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	16	48430.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48423.1	34497.9	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	17	48423.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48415.5	34584.6	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	18	48415.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48408.0	34671.4	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	19	48408.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48400.5	34758.1	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	20	48400.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48393.0	34844.8	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	21	48393.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48385.5	34931.5	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	22	48385.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48378.0	35018.1	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	23	48378.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48370.4	35104.8	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	24	48370.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48362.9	35191.5	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	25	48362.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48355.4	35278.1	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	26	48355.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48347.8	35364.8	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	27	48347.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48340.3	35451.4	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	28	48340.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48332.8	35538.1	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	29	48332.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48325.2	35624.7	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	SEP	30	48325.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	48317.7	35711.3	26035.7	100.0	76.6	0.0	0.0	176.6
Res_1	1	1980	TOT	-1	48542.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	0.0	0.0	-1.0	-1.0	3000.0	2299.3	0.0	0.0	5299.3

Reservoir Summary ACFT
STATEMOD
StateMod Operating Rule Example - ex3.* data set

RESERVOIR ID   : Res_1
RESERVOIR NAME   : Reservoir_1
RESERVOIR ACCOUNT & AMOUNT: 2   50000.; where account 0 is the total
RESERVOIR OWNER   : Res_1 Own_2
RIVER LOCATION   : Exist. Reservoir

Reservoir ID	Acc	Year	Mo	Day	Initial Storage NA (1)	From River by Priorty (+) (2)	From River by Storage (+) (3)	From River by Exc_Pln (+) (4)	From River by Loss (-) (5)	From Carrier by Priorty (+) (6)	From Carrier by Sto_Exc (+) (7)	From Carrier by Loss (-) (8)	Total Supply NA (9)	From Storage to River For Use (-) (10)	From Storage to River For Exc (-) (11)	From Storage to Carrier for Use (-) (12)	Total Release NA (13)	Evap (-) (14)	Seep & Spill (-) (15)	EOM Content NA (16)	Targt_0 Stor_n Limit NA (17)	BOM Decree Limit NA (18)	Station Balance River Inflow (+) (19)	Station Balance River Release (+) (20)	Station Balance River Divert (-) (21)	Station Balance River by Well (-) (22)	Station Balance River Outflow NA (23)
Res_1	2	1979	OCT	1	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0	25.0	0.0	0.0	0.0	50000.0	50000.0	96.8	35.8	0.0	0.0	132.5
Res_1	2	1979	OCT	2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	13	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	27	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8
Res_1	2	1979	OCT	28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	50035.8	50000.0	96.8	0.0	0.0	0.0	96.8

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Res_1          2 1979  OCT  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  OCT  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8

Res_1          2 1979  OCT  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50000.0    96.8     0.0     0.0     0.0    96.8
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1980  TOT  -1    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    25.0
0.0     0.0    25.0     0.0     0.0     0.0    -1.0    -1.0  3000.0    35.8     0.0     0.0  3035.8


                                                                                                          From
Storage to                                                           Station Balance
                                                  From River by            From Carrier by
_______________________                                  Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &    EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day       NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                     ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1979  NOV   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          2 1979  NOV   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          2 1979  NOV  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          2 1979  NOV  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          2 1979  NOV  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1          2 1979  NOV  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
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Res_1          2 1979  NOV  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1          2 1979  NOV  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   100.0     0.0     0.0     0.0   100.0
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                         From
Storage to                                                                Station Balance
                                                        From River by          From Carrier by
_______________________                                        Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________ Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo Day      NA      (+)     (+)     (+)     (-)     (+)     (+)     (-)     NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1979  DEC   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1979  DEC   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1979  DEC  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1979  DEC  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1979  DEC  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1979  DEC  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1979  DEC  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
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Res_1          2 1979  DEC  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                          From
Storage to                                                         Station Balance
                                                     From River by          From Carrier by
_______________________                                     Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1980  JAN   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1980  JAN   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1980  JAN  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1980  JAN  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1980  JAN  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1980  JAN  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  JAN  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
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Res_1           2 1980  JAN  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                                          From
Storage to                                                                 Station Balance
                                                           From River by          From Carrier by
_______________________                                           Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day       NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  FEB   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1           2 1980  FEB   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1           2 1980  FEB  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1           2 1980  FEB  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1           2 1980  FEB  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1

Res_1           2 1980  FEB  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
Res_1           2 1980  FEB  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8   107.1     0.0     0.0     0.0   107.1
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0
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                                                                                                    From
Storage to                                                              Station Balance
                                                          From River by            From Carrier by
_______________________                                          Targt_0     BOM _______________________________________
                               Initial _______________________________ _______________________ Total   River
River Carrier   Total           Seep &    EOM  Stor_n  Decree    River  River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day       NA      (+)     (+)     (+)     (-)     (+)     (+)     (-)     NA     (-)     (-
)    (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)     NA
                                  ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________ ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______

Res_1          2 1980  MAR   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50035.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50036.6 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50037.4 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50038.2 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50039.0 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1980  MAR   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50039.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50040.7 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50041.5 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50042.3 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50043.1 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1980  MAR  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50043.9 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50044.7 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50045.6 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50046.4 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50047.2 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1980  MAR  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50048.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50048.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50049.6 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50050.4 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50051.3 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1980  MAR  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50052.1 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50052.9 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50053.7 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50054.5 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50055.3 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1980  MAR  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50056.1 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50057.0 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50057.8 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50058.6 50035.8    96.8     0.0     0.0     0.0    96.8
Res_1          2 1980  MAR  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50059.4 50035.8    96.8     0.0     0.0     0.0    96.8

Res_1          2 1980  MAR  31     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50060.2 50035.8    96.8     0.0     0.0     0.0    96.8
___________ ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0
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                                                                                          From
Storage to                                                          Station Balance
                                                  From River by           From Carrier by
_______________________                                  Targt_0     BOM _______________________________________
                                Initial ______________________________ _______________________ Total   River
River Carrier   Total          Seep &    EOM  Stor_n  Decree   River  River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo Day       NA      (+)      (+)      (+)      (-)      (+)      (+)      (-)      NA      (-)      (-
)     (-)      NA     (-)      (-)      NA      NA      NA      (+)      (+)      (-)      (-)      NA
                                   ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)     (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  APR   1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50061.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR   2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50072.0 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR   3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50082.9 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR   4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50093.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR   5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50104.8 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1           2 1980  APR   6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50115.7 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR   7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50126.6 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR   8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50137.5 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR   9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50148.5 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  10     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50159.4 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1           2 1980  APR  11     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50170.3 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  12     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50181.2 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  13     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50192.2 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  14     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50203.1 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  15     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50214.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1           2 1980  APR  16     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50224.9 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  17     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50235.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  18     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50246.7 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  19     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50257.6 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  20     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50268.5 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1           2 1980  APR  21     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50279.4 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  22     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50290.3 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  23     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50301.2 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  24     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50312.1 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  25     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50323.0 50035.8   100.0     0.0     0.0     0.0   100.0

Res_1           2 1980  APR  26     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50333.9 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  27     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50344.8 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  28     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50355.7 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  29     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50366.6 50035.8   100.0     0.0     0.0     0.0   100.0
Res_1           2 1980  APR  30     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0 50377.4 50035.8   100.0     0.0     0.0     0.0   100.0
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  TOT  -1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0    -1.0    -1.0  3000.0     0.0     0.0     0.0  3000.0


                                                                                          From
Storage to                                                          Station Balance
                                                  From River by           From Carrier by
_______________________                                  Targt_0     BOM _______________________________________
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                                   Initial _______________________________ _______________________  Total   River
River Carrier   Total            Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                         Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo Day       NA     (+)      (+)      (+)      (-)      (+)      (+)      (-)      NA     (-)     (-
)     (-)      NA     (-)      (-)      NA      NA      NA      (+)      (+)      (-)      (-)      NA
                                      ( 1)     ( 2)     ( 3)     ( 4)     ( 5)     ( 6)     ( 7)     ( 8)     ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  _______ _______ _______ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1            2 1980  MAY   1     0.0   384.1     0.0     0.0     0.0     0.0     0.0   384.1     0.0     0.0
0.0     0.0     0.0     0.0     0.0   384.1 50388.3 50035.8   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY   2   384.1   384.0     0.0     0.0     0.0     0.0     0.0   384.0     0.0     0.0
0.0     0.0     0.0     0.1     0.0   768.0 50010.1 49648.7   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY   3   768.0   384.0     0.0     0.0     0.0     0.0     0.0   384.0     0.0     0.0
0.0     0.0     0.0     0.2     0.0  1151.8 49632.0 49261.6   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY   4  1151.8   383.9     0.0     0.0     0.0     0.0     0.0   383.9     0.0     0.0
0.0     0.0     0.0     0.3     0.0  1535.4 49253.9 48874.5   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY   5  1535.4   383.8     0.0     0.0     0.0     0.0     0.0   383.8     0.0     0.0
0.0     0.0     0.0     0.3     0.0  1918.9 48875.9 48487.4   483.9     0.0   387.1     0.0    96.8

Res_1            2 1980  MAY   6  1918.9   383.8     0.0     0.0     0.0     0.0     0.0   383.8     0.0     0.0
0.0     0.0     0.0     0.4     0.0  2302.3 48497.9 48100.3   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY   7  2302.3   383.7     0.0     0.0     0.0     0.0     0.0   383.7     0.0     0.0
0.0     0.0     0.0     0.5     0.0  2685.5 48120.0 47713.2   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY   8  2685.5   383.6     0.0     0.0     0.0     0.0     0.0   383.6     0.0     0.0
0.0     0.0     0.0     0.5     0.0  3068.6 47742.2 47326.1   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY   9  3068.6   383.6     0.0     0.0     0.0     0.0     0.0   383.6     0.0     0.0
0.0     0.0     0.0     0.6     0.0  3451.6 47364.3 46939.0   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  10  3451.6   383.5     0.0     0.0     0.0     0.0     0.0   383.5     0.0     0.0
0.0     0.0     0.0     0.7     0.0  3834.4 46986.5 46551.9   483.9     0.0   387.1     0.0    96.8

Res_1            2 1980  MAY  11  3834.4   383.4     0.0     0.0     0.0     0.0     0.0   383.4     0.0     0.0
0.0     0.0     0.0     0.7     0.0  4217.0 46608.8 46164.8   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  12  4217.0   383.3     0.0     0.0     0.0     0.0     0.0   383.3     0.0     0.0
0.0     0.0     0.0     0.8     0.0  4599.6 46231.1 45777.7   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  13  4599.6   383.3     0.0     0.0     0.0     0.0     0.0   383.3     0.0     0.0
0.0     0.0     0.0     0.9     0.0  4982.0 45853.5 45390.6   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  14  4982.0   383.2     0.0     0.0     0.0     0.0     0.0   383.2     0.0     0.0
0.0     0.0     0.0     0.9     0.0  5364.3 45475.9 45003.5   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  15  5364.3   383.1     0.0     0.0     0.0     0.0     0.0   383.1     0.0     0.0
0.0     0.0     0.0     1.0     0.0  5746.4 45098.4 44616.4   483.9     0.0   387.1     0.0    96.8

Res_1            2 1980  MAY  16  5746.4   383.1     0.0     0.0     0.0     0.0     0.0   383.1     0.0     0.0
0.0     0.0     0.0     1.1     0.0  6128.4 44720.9 44229.3   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  17  6128.4   383.0     0.0     0.0     0.0     0.0     0.0   383.0     0.0     0.0
0.0     0.0     0.0     1.1     0.0  6510.2 44343.4 43842.2   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  18  6510.2   382.9     0.0     0.0     0.0     0.0     0.0   382.9     0.0     0.0
0.0     0.0     0.0     1.2     0.0  6891.9 43966.0 43455.1   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  19  6891.9   382.8     0.0     0.0     0.0     0.0     0.0   382.8     0.0     0.0
0.0     0.0     0.0     1.3     0.0  7273.5 43588.7 43068.0   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  20  7273.5   382.8     0.0     0.0     0.0     0.0     0.0   382.8     0.0     0.0
0.0     0.0     0.0     1.3     0.0  7655.0 43211.4 42680.9   483.9     0.0   387.1     0.0    96.8

Res_1            2 1980  MAY  21  7655.0   382.7     0.0     0.0     0.0     0.0     0.0   382.7     0.0     0.0
0.0     0.0     0.0     1.4     0.0  8036.2 42834.1 42293.8   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  22  8036.2   382.6     0.0     0.0     0.0     0.0     0.0   382.6     0.0     0.0
0.0     0.0     0.0     1.4     0.0  8417.4 42456.9 41906.7   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  23  8417.4   382.5     0.0     0.0     0.0     0.0     0.0   382.5     0.0     0.0
0.0     0.0     0.0     1.5     0.0  8798.4 42079.7 41519.6   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  24  8798.4   382.4     0.0     0.0     0.0     0.0     0.0   382.4     0.0     0.0
0.0     0.0     0.0     1.6     0.0  9179.3 41702.6 41132.5   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  25  9179.3   382.4     0.0     0.0     0.0     0.0     0.0   382.4     0.0     0.0
0.0     0.0     0.0     1.6     0.0  9560.0 41325.5 40745.4   483.9     0.0   387.1     0.0    96.8

Res_1            2 1980  MAY  26  9560.0   382.3     0.0     0.0     0.0     0.0     0.0   382.3     0.0     0.0
0.0     0.0     0.0     1.7     0.0  9940.6 40948.5 40358.3   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  27  9940.6   382.2     0.0     0.0     0.0     0.0     0.0   382.2     0.0     0.0
0.0     0.0     0.0     1.8     0.0 10321.1 40571.5 39971.2   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  28 10321.1   382.1     0.0     0.0     0.0     0.0     0.0   382.1     0.0     0.0
0.0     0.0     0.0     1.8     0.0 10701.4 40194.6 39584.1   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  29 10701.4   382.1     0.0     0.0     0.0     0.0     0.0   382.1     0.0     0.0
0.0     0.0     0.0     1.9     0.0 11081.6 39817.7 39197.0   483.9     0.0   387.1     0.0    96.8
Res_1            2 1980  MAY  30 11081.6   382.0     0.0     0.0     0.0     0.0     0.0   382.0     0.0     0.0
0.0     0.0     0.0     1.9     0.0 11461.6 39440.9 38809.9   483.9     0.0   387.1     0.0    96.8

Res_1            2 1980  MAY  31 11461.6   381.9     0.0     0.0     0.0     0.0     0.0   381.9     0.0     0.0
0.0     0.0     0.0     2.0     0.0 11841.5 39064.1 38422.8   483.9     0.0   387.1     0.0    96.8
___________  _______ _______ _______ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1            2 1980  TOT  -1     0.0 11874.1     0.0     0.0     0.0     0.0     0.0 11874.1     0.0     0.0
0.0     0.0     0.0     2.0     0.0     0.0    -1.0    -1.0 15000.0     0.0 12000.0     0.0  3000.0


                                                                                                          From
Storage to                                                                    Station Balance
                                                           From River by          From Carrier by
_______________________                                            Targt_0     BOM _______________________________________
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                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo Day       NA      (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA      (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  JUN   1 11841.5   394.5     0.0     0.0     0.0     0.0     0.0   394.5     0.0     0.0
0.0     0.0     0.0     5.0     0.0 12231.0 38687.3 38035.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN   2 12231.0   394.3     0.0     0.0     0.0     0.0     0.0   394.3     0.0     0.0
0.0     0.0     0.0     5.2     0.0 12620.2 38312.6 37635.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN   3 12620.2   394.1     0.0     0.0     0.0     0.0     0.0   394.1     0.0     0.0
0.0     0.0     0.0     5.3     0.0 13009.0 37938.1 37235.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN   4 13009.0   393.9     0.0     0.0     0.0     0.0     0.0   393.9     0.0     0.0
0.0     0.0     0.0     5.5     0.0 13397.4 37563.6 36835.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN   5 13397.4   393.7     0.0     0.0     0.0     0.0     0.0   393.7     0.0     0.0
0.0     0.0     0.0     5.6     0.0 13785.5 37189.2 36435.7   500.0     0.0   400.0     0.0   100.0

Res_1           2 1980  JUN   6 13785.5   393.5     0.0     0.0     0.0     0.0     0.0   393.5     0.0     0.0
0.0     0.0     0.0     5.8     0.0 14173.2 36815.0 36035.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN   7 14173.2   393.3     0.0     0.0     0.0     0.0     0.0   393.3     0.0     0.0
0.0     0.0     0.0     5.9     0.0 14560.5 36440.8 35635.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN   8 14560.5   393.0     0.0     0.0     0.0     0.0     0.0   393.0     0.0     0.0
0.0     0.0     0.0     6.0     0.0 14947.5 36066.7 35235.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN   9 14947.5   392.8     0.0     0.0     0.0     0.0     0.0   392.8     0.0     0.0
0.0     0.0     0.0     6.2     0.0 15334.2 35692.7 34835.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  10 15334.2   392.6     0.0     0.0     0.0     0.0     0.0   392.6     0.0     0.0
0.0     0.0     0.0     6.3     0.0 15720.4 35318.9 34435.7   500.0     0.0   400.0     0.0   100.0

Res_1           2 1980  JUN  11 15720.4   392.4     0.0     0.0     0.0     0.0     0.0   392.4     0.0     0.0
0.0     0.0     0.0     6.5     0.0 16106.3 34945.1 34035.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  12 16106.3   392.2     0.0     0.0     0.0     0.0     0.0   392.2     0.0     0.0
0.0     0.0     0.0     6.6     0.0 16491.9 34571.4 33635.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  13 16491.9   391.9     0.0     0.0     0.0     0.0     0.0   391.9     0.0     0.0
0.0     0.0     0.0     6.8     0.0 16877.1 34197.8 33235.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  14 16877.1   391.7     0.0     0.0     0.0     0.0     0.0   391.7     0.0     0.0
0.0     0.0     0.0     6.9     0.0 17261.9 33824.3 32835.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  15 17261.9   391.5     0.0     0.0     0.0     0.0     0.0   391.5     0.0     0.0
0.0     0.0     0.0     7.0     0.0 17646.3 33450.9 32435.7   500.0     0.0   400.0     0.0   100.0

Res_1           2 1980  JUN  16 17646.3   391.2     0.0     0.0     0.0     0.0     0.0   391.2     0.0     0.0
0.0     0.0     0.0     7.2     0.0 18030.4 33077.6 32035.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  17 18030.4   391.0     0.0     0.0     0.0     0.0     0.0   391.0     0.0     0.0
0.0     0.0     0.0     7.3     0.0 18414.0 32704.4 31635.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  18 18414.0   390.8     0.0     0.0     0.0     0.0     0.0   390.8     0.0     0.0
0.0     0.0     0.0     7.5     0.0 18797.4 32331.3 31235.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  19 18797.4   390.5     0.0     0.0     0.0     0.0     0.0   390.5     0.0     0.0
0.0     0.0     0.0     7.6     0.0 19180.3 31958.3 30835.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  20 19180.3   390.3     0.0     0.0     0.0     0.0     0.0   390.3     0.0     0.0
0.0     0.0     0.0     7.7     0.0 19562.9 31585.4 30435.7   500.0     0.0   400.0     0.0   100.0

Res_1           2 1980  JUN  21 19562.9   390.1     0.0     0.0     0.0     0.0     0.0   390.1     0.0     0.0
0.0     0.0     0.0     7.9     0.0 19945.1 31212.6 30035.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  22 19945.1   389.8     0.0     0.0     0.0     0.0     0.0   389.8     0.0     0.0
0.0     0.0     0.0     8.0     0.0 20326.9 30839.9 29635.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  23 20326.9   389.6     0.0     0.0     0.0     0.0     0.0   389.6     0.0     0.0
0.0     0.0     0.0     8.1     0.0 20708.3 30467.3 29235.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  24 20708.3   389.3     0.0     0.0     0.0     0.0     0.0   389.3     0.0     0.0
0.0     0.0     0.0     8.3     0.0 21089.4 30094.8 28835.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  25 21089.4   389.1     0.0     0.0     0.0     0.0     0.0   389.1     0.0     0.0
0.0     0.0     0.0     8.4     0.0 21470.0 29722.4 28435.7   500.0     0.0   400.0     0.0   100.0

Res_1           2 1980  JUN  26 21470.0   388.8     0.0     0.0     0.0     0.0     0.0   388.8     0.0     0.0
0.0     0.0     0.0     8.5     0.0 21850.3 29350.1 28035.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  27 21850.3   388.6     0.0     0.0     0.0     0.0     0.0   388.6     0.0     0.0
0.0     0.0     0.0     8.7     0.0 22230.2 28977.8 27635.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  28 22230.2   388.3     0.0     0.0     0.0     0.0     0.0   388.3     0.0     0.0
0.0     0.0     0.0     8.8     0.0 22609.7 28605.7 27235.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  29 22609.7   388.1     0.0     0.0     0.0     0.0     0.0   388.1     0.0     0.0
0.0     0.0     0.0     8.9     0.0 22988.8 28233.6 26835.7   500.0     0.0   400.0     0.0   100.0
Res_1           2 1980  JUN  30 22988.8   387.8     0.0     0.0     0.0     0.0     0.0   387.8     0.0     0.0
0.0     0.0     0.0     9.1     0.0 23367.6 27861.6 26435.7   500.0     0.0   400.0     0.0   100.0
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  TOT  -1 11841.5 11738.7     0.0     0.0     0.0     0.0     0.0 11738.7     0.0     0.0
0.0     0.0     0.0     9.1     0.0     0.0    -1.0    -1.0 15000.0     0.0 12000.0     0.0  3000.0


                                                                                                          From
Storage to                                                                 Station Balance
                                                       From River by           From Carrier by
_______________________                                       Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
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ID            Acc Year   Mo Day      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                    ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________ ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  JUL   1 23367.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    72.0
0.0     0.0    72.0     5.1     0.0 23290.5 27489.7 26035.7    96.8    72.0     0.0     0.0   168.8
Res_1           2 1980  JUL   2 23290.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    77.8
0.0     0.0    77.8     5.0     0.0 23207.7 27577.5 26035.7    96.8    77.8     0.0     0.0   174.6
Res_1           2 1980  JUL   3 23207.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.1
0.0     0.0    78.1     5.0     0.0 23124.5 27671.0 26035.7    96.8    78.1     0.0     0.0   174.9
Res_1           2 1980  JUL   4 23124.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     5.0     0.0 23041.2 27764.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL   5 23041.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     5.0     0.0 22957.9 27858.8 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           2 1980  JUL   6 22957.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     5.0     0.0 22874.6 27952.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL   7 22874.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     5.0     0.0 22791.3 28046.7 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL   8 22791.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.9     0.0 22708.1 28140.7 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL   9 22708.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.9     0.0 22624.8 28234.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  10 22624.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.9     0.0 22541.6 28328.5 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           2 1980  JUL  11 22541.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.9     0.0 22458.4 28422.4 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  12 22458.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.9     0.0 22375.2 28516.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  13 22375.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.9     0.0 22292.1 28610.2 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  14 22292.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.9     0.0 22208.9 28704.1 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  15 22208.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.8     0.0 22125.8 28797.9 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           2 1980  JUL  16 22125.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.8     0.0 22042.6 28891.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  17 22042.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.8     0.0 21959.5 28985.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  18 21959.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.8     0.0 21876.4 29079.5 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  19 21876.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.8     0.0 21793.3 29173.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  20 21793.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.8     0.0 21710.3 29267.1 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           2 1980  JUL  21 21710.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.7     0.0 21627.2 29360.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  22 21627.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.7     0.0 21544.2 29454.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  23 21544.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.7     0.0 21461.2 29548.4 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  24 21461.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.7     0.0 21378.2 29642.1 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  25 21378.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.7     0.0 21295.2 29735.9 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           2 1980  JUL  26 21295.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.7     0.0 21212.2 29829.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  27 21212.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.6     0.0 21129.3 29923.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  28 21129.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.6     0.0 21046.3 30017.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  29 21046.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.6     0.0 20963.4 30110.7 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1           2 1980  JUL  30 20963.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.6     0.0 20880.5 30204.3 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1           2 1980  JUL  31 20880.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     4.6     0.0 20797.6 30298.0 26035.7    96.8    78.3     0.0     0.0   175.1
___________ ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  TOT  -1 23367.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2420.5
0.0     0.0  2420.5     4.6     0.0     0.0    -1.0    -1.0  3000.0  2420.5     0.0     0.0  5420.5


                                                                                                          From
Storage to                                                            Station Balance
                                                    From River by          From Carrier by
                                                          Targt_0     BOM _______________________________
_______________________                                                                                      
                                Initial ______________________________ _______________________  Total   River
River Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
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ID           Acc Year   Mo Day      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                  ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1         2 1980  AUG   1 20797.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.7     0.0 20715.7 30391.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG   2 20715.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.6     0.0 20633.7 30482.2 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG   3 20633.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.6     0.0 20551.8 30572.7 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG   4 20551.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.6     0.0 20469.9 30663.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG   5 20469.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.6     0.0 20388.0 30753.8 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1         2 1980  AUG   6 20388.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.6     0.0 20306.1 30844.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG   7 20306.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.6     0.0 20224.2 30934.9 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG   8 20224.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.6     0.0 20142.3 31025.4 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG   9 20142.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.5     0.0 20060.5 31115.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  10 20060.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.5     0.0 19978.6 31206.3 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1         2 1980  AUG  11 19978.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.5     0.0 19896.8 31296.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  12 19896.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.5     0.0 19815.0 31387.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  13 19815.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.5     0.0 19733.2 31477.7 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  14 19733.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.5     0.0 19651.4 31568.1 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  15 19651.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.5     0.0 19569.6 31658.6 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1         2 1980  AUG  16 19569.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.5     0.0 19487.8 31749.0 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  17 19487.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.4     0.0 19406.1 31839.4 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  18 19406.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.4     0.0 19324.3 31929.8 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  19 19324.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.4     0.0 19242.6 32020.2 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  20 19242.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.4     0.0 19160.9 32110.5 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1         2 1980  AUG  21 19160.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.4     0.0 19079.2 32200.9 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  22 19079.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.4     0.0 18997.5 32291.3 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  23 18997.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.4     0.0 18915.8 32381.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  24 18915.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.4     0.0 18834.2 32471.9 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  25 18834.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.3     0.0 18752.5 32562.3 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1         2 1980  AUG  26 18752.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.3     0.0 18670.9 32652.6 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  27 18670.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.3     0.0 18589.3 32742.9 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  28 18589.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.3     0.0 18507.6 32833.2 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  29 18507.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.3     0.0 18426.0 32923.4 26035.7    96.8    78.3     0.0     0.0   175.1
Res_1         2 1980  AUG  30 18426.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.3     0.0 18344.5 33013.7 26035.7    96.8    78.3     0.0     0.0   175.1

Res_1         2 1980  AUG  31 18344.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    78.3
0.0     0.0    78.3     3.3     0.0 18262.9 33104.0 26035.7    96.8    78.3     0.0     0.0   175.1
___________  ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1         2 1980  TOT  -1 20797.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2427.5
0.0     0.0  2427.5     3.3     0.0     0.0    -1.0    -1.0  3000.0  2427.5     0.0     0.0  5427.5


                                                                                                         From
Storage to                                                            Station Balance
                                                    From River by          From Carrier by
_______________________                                    Targt_0     BOM _______________________________________
                                Initial _______________________________ _______________________  Total   River
River Carrier   Total          Seep &      EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                       Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For
Exc for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
```

```
ID            Acc Year   Mo Day      NA      (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-
)     (-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                   ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________ ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1980  SEP   1 18262.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    77.6
0.0     0.0    77.6     2.8     0.0 18182.5 33194.2 26035.7   100.0    77.6     0.0     0.0   177.6
Res_1          2 1980  SEP   2 18182.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    77.1
0.0     0.0    77.1     2.8     0.0 18102.6 33282.1 26035.7   100.0    77.1     0.0     0.0   177.1
Res_1          2 1980  SEP   3 18102.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.8
0.0     0.0    76.8     2.8     0.0 18023.0 33369.5 26035.7   100.0    76.8     0.0     0.0   176.8
Res_1          2 1980  SEP   4 18023.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.8     0.0 17943.7 33456.5 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP   5 17943.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.8     0.0 17864.4 33543.3 26035.7   100.0    76.6     0.0     0.0   176.6

Res_1          2 1980  SEP   6 17864.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.7     0.0 17785.0 33630.1 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP   7 17785.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.7     0.0 17705.7 33717.0 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP   8 17705.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.7     0.0 17626.4 33803.8 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP   9 17626.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.7     0.0 17547.1 33890.6 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  10 17547.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.7     0.0 17467.8 33977.4 26035.7   100.0    76.6     0.0     0.0   176.6

Res_1          2 1980  SEP  11 17467.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.7     0.0 17388.5 34064.1 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  12 17388.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.7     0.0 17309.3 34150.9 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  13 17309.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.7     0.0 17230.0 34237.7 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  14 17230.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.7     0.0 17150.8 34324.4 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  15 17150.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.6     0.0 17071.5 34411.2 26035.7   100.0    76.6     0.0     0.0   176.6

Res_1          2 1980  SEP  16 17071.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.6     0.0 16992.3 34497.9 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  17 16992.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.6     0.0 16913.1 34584.6 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  18 16913.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.6     0.0 16833.9 34671.4 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  19 16833.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.6     0.0 16754.7 34758.1 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  20 16754.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.6     0.0 16675.5 34844.8 26035.7   100.0    76.6     0.0     0.0   176.6

Res_1          2 1980  SEP  21 16675.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.6     0.0 16596.4 34931.5 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  22 16596.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.6     0.0 16517.2 35018.1 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  23 16517.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.6     0.0 16438.1 35104.8 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  24 16438.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.5     0.0 16359.0 35191.5 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  25 16359.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.5     0.0 16279.8 35278.1 26035.7   100.0    76.6     0.0     0.0   176.6

Res_1          2 1980  SEP  26 16279.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.5     0.0 16200.7 35364.8 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  27 16200.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.5     0.0 16121.6 35451.4 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  28 16121.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.5     0.0 16042.5 35538.1 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  29 16042.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.5     0.0 15963.5 35624.7 26035.7   100.0    76.6     0.0     0.0   176.6
Res_1          2 1980  SEP  30 15963.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    76.6
0.0     0.0    76.6     2.5     0.0 15884.4 35711.3 26035.7   100.0    76.6     0.0     0.0   176.6
___________ ____ ____ ____ ___ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1980  TOT  -1 18262.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2299.3
0.0     0.0  2299.3     2.5     0.0     0.0    -1.0    -1.0  3000.0  2299.3     0.0     0.0  5299.3

#
# ________________________________________________________________________________
# *.xop       Operational Right Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex3.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 15: 4:56
# Time Step:         Daily
#
# ________________________________________________________________________________
```

Operational Right Summary ACFT

ID = Opr_1 Name = Opr_Res_1_to_Target Opr Type = 9 Admin # = 10.00000
Source 1 = Res_1 Destination = 0 Year On = 0 Year Off = 9999

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1980	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AVG	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Operational Right Summary ACFT

ID = Opr_2 Name = Opr_Res_1_to_Dem_2 Opr Type = 2 Admin # = 9.00000
Source 1 = Res_1 Destination = Dem_2 Year On = 0 Year Off = 9999

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1980	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8
AVG	10.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.8

Operational Right Summary ACFT

ID = Opr_3 Name = Opr_Res_1_to_ISF Opr Type = 1 Admin # = 9.00000
Source 1 = Res_1 Destination = ISF Year On = 0 Year Off = 9999

YEAR	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	TOT
1980	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2420.5	2427.5	2299.3	7172.3
AVG	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2420.5	2427.5	2299.3	7172.3

Example 9

```
# Exhibit 9.1
# *.rsp; response file for Statemod Example 9
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                      Name
# ______________________________________    _____________________________
Control                                   = ex9.ctl
River_Network                             = ..\ex1\ex1.rin
StreamGage_Station                        = ..\ex1\ex1.ris
Stream_Base_Monthly                       = ..\ex1\ex1.rim
Diversion_Station                         = ..\ex1\ex1.dds
Diversion_Right                           = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                  = ..\ex1\ex1.ddm
Instreamflow_Station                      = ..\ex1\ex1.ifs
Instreamflow_Right                        = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly        = ..\ex1\ex1.ifa
Operational_Right                         = ex9.opr
DelayTable_Monthly                        = ..\ex1\ex1.urm
OutputRequest                             = ..\ex1\ex1.out

# Exhibit 9.2
# ex*.ctl;  Control file for StateMod Example 9
#
#
  STATEMOD
  StateMod Operating Rule Example - ex9.*
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;    ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;      ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       1     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       6     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       1     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       0     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       0     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       1     : isig    Number of significant digits behind decimal point in output files

# Exhibit 9.3
# *.opr; operating rules file for Statemod Example 9
#      This file lists the operating rules used in model simulation
#
#
#                      GUIDE TO COLUMN ENTRIES
#     ========================================
#          ID            ID number of operating rule that is used to separate operating rule output in *.xop file
#          Name       Name of operating rule - used for descriptive purposes only
```

```
#          Admin#     Administration number used to determine priority of operational water rights relative to other
operations and direct diversion, reservoir, instream flow, and well rights (see tabulation in *.xwr file)
#          # Str      Number of carrier structures, monthly on/off switches, or monthly volumetrics (flag telling
StateMod program the number of entries on next line)
#          On/Off     1 for ON and 0 for OFF
#          Dest ID    Destination of operating rule whose demand is to be met by simulating the operating rule
#          Dest Ac    Account at destination to be met by operating rule - typically 1 for a diversion structure and
account number for reservoir destination
#          Sou1 ID    ID number of primary source of water under which water right is being diverted in operating rule
- typically a water right, reservoir, or Plan structure
#          Sou1 Ac    Account of Sou1 - typically 1 for a diversion structure and account number for reservoir source
#          Sou2 ID    ID of Plan where reusable storage water or reusable ditch credits is accounted
#          Sou2 Ac    Percentage of Plan supplies available for operation
#          Type       Rule type corresponding with definitions in Chapter 4 of StateMod documentation
#          ReusePlan  ID of Plan where reusable return flows or diversions to storage are accounted
#          Div Type   'Diversion' indicates pro-rata diversion of source water right priority or exchange of reusable
credits to Dest1
#                       'Depletion' indicates pro-rata diversion of source water right priority consumptive use or
augmentation of upstream diversions at Dest1
#          OprLoss    Percentage of simulated diversion lost in carrier ditch (only applies to certain rules - see
StateMod documentation, Section 4.13)
#          Limit      Capacity limit for carrier structures different from capacity in .dds file (used to represent
constricted conveyance capacity for winter deliveries to reservoirs)
#          Comments   Description of rule type
#
# ID        Name                    NA                    Admin#   # Str  On/Off Dest Id     Dest Ac  Sou1 Id     Sou1
Ac  Sou2 Id     Sou2 Ac     Type ReusePlan    Div Type      OprLoss   Limit Comments
# ---------eb----------------------eb----------exxxxb----------eb------eb------e-b----------eb------e-b----------eb---
---e-b----------eb------eb------exb----------exb----------exb------eb------exb----------
Opr_1       Opr_Pro_Rata_Exchange                        6.00001      0.       1 Dem_3             1 Dem_2_WR_1
10 NA               0      24 NA           Diversion           0       0       0    9999 Direct Flow Exchange of
Pro-Rata Water Right

     5000.      0.      0.      0.      0.      0.   5000.   5000.   5000.   5000.   5000.   5000.  35000.0

#
# __________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex9.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 12: 8:18
# Time Step:         Monthly
#
# __________________________________________________________________________________

                               Water Budget  ACFT

               Stream                    From/To      From       From       Total                 From River
Well    Reservoir  Reservoir    Stream   Reservoir           To       SoilM
Year   Mo      Inflow      Return      GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change       SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
 1979 OCT       4000.0      1306.7          0.0          0.0          0.0      5306.7      4666.7          0.0          0.0
0.0          0.0       640.0          0.0          0.0          0.0      5306.7          0.0      1733.3          0.0
0.0          0.0
 1979 NOV       4000.0      2675.6          0.0          0.0          0.0      6675.6      5555.6          0.0          0.0
0.0          0.0      1120.0          0.0          0.0          0.0      6675.6          0.0      2177.8          0.0
0.0          0.0
 1979 DEC       4000.0      3291.9          0.0          0.0          0.0      7291.9      5851.9          0.0          0.0
0.0          0.0      1440.0          0.0          0.0          0.0      7291.9          0.0      2325.9          0.0
0.0          0.0
 1980 JAN       4000.0      3550.6          0.0          0.0          0.0      7550.6      5950.6          0.0          0.0
0.0          0.0      1600.0          0.0          0.0          0.0      7550.6          0.0      2375.3          0.0
0.0          0.0
 1980 FEB       4000.0      3583.5          0.0          0.0          0.0      7583.5      5983.5          0.0          0.0
0.0          0.0      1600.0          0.0          0.0          0.0      7583.5          0.0      2391.8          0.0
0.0          0.0
 1980 MAR       4000.0      3594.5          0.0          0.0          0.0      7594.5      5994.5          0.0          0.0
0.0          0.0      1600.0          0.0          0.0          0.0      7594.5          0.0      2397.3          0.0
0.0          0.0
 1980 APR       4000.0      3531.3          0.0          0.0          0.0      7531.3      5730.9          0.0          0.0
0.0          0.0      1800.5          0.0          0.0          0.0      7531.3          0.0      2265.4          0.0
0.0          0.0
 1980 MAY      20000.0      3657.7          0.0          0.0          0.0     23657.7      6500.0          0.0          0.0
0.0          0.0     17157.7          0.0          0.0          0.0     23657.7          0.0      2650.0          0.0
0.0          0.0
 1980 JUN      20000.0      3850.0          0.0          0.0          0.0     23850.0      6500.0          0.0          0.0
0.0          0.0     17350.0          0.0          0.0          0.0     23850.0          0.0      2650.0          0.0
0.0          0.0
 1980 JUL       4000.0      3687.1          0.0          0.0          0.0      7687.1      5848.3          0.0          0.0
0.0          0.0      1838.8          0.0          0.0          0.0      7687.1          0.0      2324.2          0.0
0.0          0.0
```

1980 AUG	4000.0	3483.4	0.0	0.0	0.0	7483.4	5685.4	0.0	0.0	0.0	0.0	1798.0	0.0	0.0	0.0	7483.4	0.0	2242.7	0.0	0.0	0.0
1980 SEP	4000.0	3434.7	0.0	0.0	0.0	7434.7	5653.6	0.0	0.0	0.0	0.0	1781.2	0.0	0.0	0.0	7434.7	0.0	2226.8	0.0	0.0	0.0
1980 Tot	80000.0	39647.0	0.0	0.0	0.0	119647.0	69920.9	0.0	0.0	0.0	0.0	49726.2	0.0	0.0	0.0	119647.0	0.0	27760.4	0.0	0.0	0.0

Water Budget ACFT

Year Mo	Stream Inflow	Return	From/To GWStorage	From SoilM	From Plan	Total Inflow	Divert	From River by Well	Well Depletion	Reservoir Evaporation	Reservoir Seepage	Stream Outflow	Reservoir Change	To SoilM	SoilM Change	Total Outflow	Delta	CU	Loss	Pumping	Salvage
Ave OCT	4000.0	1306.7	0.0	0.0	0.0	5306.7	4666.7	0.0	0.0	0.0	0.0	640.0	0.0	0.0	0.0	5306.7	0.0	1733.3	0.0	0.0	0.0
Ave NOV	4000.0	2675.6	0.0	0.0	0.0	6675.6	5555.6	0.0	0.0	0.0	0.0	1120.0	0.0	0.0	0.0	6675.6	0.0	2177.8	0.0	0.0	0.0
Ave DEC	4000.0	3291.9	0.0	0.0	0.0	7291.9	5851.9	0.0	0.0	0.0	0.0	1440.0	0.0	0.0	0.0	7291.9	0.0	2325.9	0.0	0.0	0.0
Ave JAN	4000.0	3550.6	0.0	0.0	0.0	7550.6	5950.6	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7550.6	0.0	2375.3	0.0	0.0	0.0
Ave FEB	4000.0	3583.5	0.0	0.0	0.0	7583.5	5983.5	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7583.5	0.0	2391.8	0.0	0.0	0.0
Ave MAR	4000.0	3594.5	0.0	0.0	0.0	7594.5	5994.5	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7594.5	0.0	2397.3	0.0	0.0	0.0
Ave APR	4000.0	3531.3	0.0	0.0	0.0	7531.3	5730.9	0.0	0.0	0.0	0.0	1800.5	0.0	0.0	0.0	7531.3	0.0	2265.4	0.0	0.0	0.0
Ave MAY	20000.0	3657.7	0.0	0.0	0.0	23657.7	6500.0	0.0	0.0	0.0	0.0	17157.7	0.0	0.0	0.0	23657.7	0.0	2650.0	0.0	0.0	0.0
Ave JUN	20000.0	3850.0	0.0	0.0	0.0	23850.0	6500.0	0.0	0.0	0.0	0.0	17350.0	0.0	0.0	0.0	23850.0	0.0	2650.0	0.0	0.0	0.0
Ave JUL	4000.0	3687.1	0.0	0.0	0.0	7687.1	5848.3	0.0	0.0	0.0	0.0	1838.8	0.0	0.0	0.0	7687.1	0.0	2324.2	0.0	0.0	0.0
Ave AUG	4000.0	3483.4	0.0	0.0	0.0	7483.4	5685.4	0.0	0.0	0.0	0.0	1798.0	0.0	0.0	0.0	7483.4	0.0	2242.7	0.0	0.0	0.0
Ave SEP	4000.0	3434.7	0.0	0.0	0.0	7434.7	5653.6	0.0	0.0	0.0	0.0	1781.2	0.0	0.0	0.0	7434.7	0.0	2226.8	0.0	0.0	0.0
Ave Tot	80000.0	39647.0	0.0	0.0	0.0	119647.0	69920.9	0.0	0.0	0.0	0.0	49726.2	0.0	0.0	0.0	119647.0	0.0	27760.4	0.0	0.0	0.0
							0.0 (6)														
							69920.9														

Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency + max (Resevoir Evaporation (Evap), 0.0).

(2) Loss is not part of the Stream Water Balance. It is the portion of a diversion, well pumping and reservoir seepage that does not return to the stream

(3) Pumping is not part of the Stream Balance. Its impact on the stream is included in the From River by Well and Well Depletion columns

(4) Salvage is not part of the Stream Water Balance. It is the portion of well pumping that does not impact the stream

(5) From Plan is water from a reuse plan.

(6) Divert does not include diversions by an instream flow or a T&C plan. Also to avoid double accounting with reservoir storage it has reduced by:

1	0. af/yr	for Diverted to Storage.
2	0. af/yr	for a Diversion Carrier.
3	0. af/yr	for a Reservior Carrier.
4	0. af/yr	for a Plan Carrier.
	0. af/yr	Total

```
#
# ______________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex9.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 12: 8:12
# Time Step:         Monthly
#
# ______________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =          7
#
#
________________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
           operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID               Type         Admin #  On/Off  Str ID #1    Str ID #2          Amount Right Name
Str Name #1               Str Name #2
#    (1) (2)               (3)             (4)     (5)  (6)          (7)                   (8) (9)
(10)                       (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

       1 Dem_1_WR_1          3         2.00000       1  Dem_1        -1              100.000 c M&I Demand _1
Municipal Demand _1
       2 Dem_2_WR_1          3         6.00000       0  Dem_2        -1               60.000 c Irrigation Demand _2
Irrigation Demand _2

       3 Opr_1             124         6.00001       1  -1           -1               -1.000 x Opr_Pro_Rata_Exchange

       4 Dem_3_WR_1          3         7.00000       1  Dem_3        -1              100.000 c Irrigation Demand _3
Irrigation Demand _3
       5 ISF_WR_1            1         9.00000       1  ISF          -1               65.500 c Instream Flow 1
Instream Demand
       6 Dem_4_WR_1          3        10.00000       1  Dem_4        -1              100.000 c Irrigation Demand _4
Irrigation Demand _4
       7 Dem_5_WR_1          3        15.00000       1  Dem_5        -1              100.000 c Irrigation Demand _5
Irrigation Demand _5

#
# ______________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex9.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 12: 8: 4
# Time Step:         Monthly
#
# ______________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex9.*
PAGE NO.   1
```

```
    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand               From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU            To    Total           Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3       1979  OCT  1000.0   500.0   574.4     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0   943.4    56.6    28.3   471.7     0.0   471.7     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
943.4    0.0    56.6     0.0 Dem_1           100.000
Dem_3       Dem_3       1979  NOV  1000.0   500.0   888.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   888.9   111.1    55.6   444.4     0.0   444.4     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
888.9    0.0   111.1     0.0 Dem_1           100.000
Dem_3       Dem_3       1979  DEC  1000.0   500.0   963.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   963.0    37.0    18.5   481.5     0.0   481.5     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
963.0    0.0    37.0     0.0 Dem_1           100.000
Dem_3       Dem_3       1980  JAN  1000.0   500.0   987.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   987.7    12.3     6.2   493.8     0.0   493.8     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
987.7    0.0    12.3     0.0 Dem_1           100.000
Dem_3       Dem_3       1980  FEB  1000.0   500.0   995.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   995.9     4.1     2.1   497.9     0.0   497.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
995.9    0.0     4.1     0.0 Dem_1           100.000
Dem_3       Dem_3       1980  MAR  1000.0   500.0   998.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   998.6     1.4     0.7   499.3     0.0   499.3     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
998.6    0.0     1.4     0.0 Dem_1           100.000
Dem_3       Dem_3       1980  APR  1000.0   500.0   643.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3       1980  MAY  1000.0   500.0   631.1     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  4000.0 NA                -1.000
Dem_3       Dem_3       1980  JUN  1000.0   500.0   643.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  4000.0 NA                -1.000
Dem_3       Dem_3       1980  JUL  1000.0   500.0   631.1     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3       1980  AUG  1000.0   500.0   631.1     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3       1980  SEP  1000.0   500.0   643.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_3       Dem_3       1980  TOT 12000.0  6000.0  9230.6     0.0  2546.8     0.0     0.0     0.0     0.0     0.0
0.0     0.0 11777.4   222.6   111.3  5888.7     0.0  5888.7     0.0     0.0 20000.0     0.0     0.0     0.0 20000.0
11777.4     0.0  8222.6  8000.0 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex9.*
PAGE NO.   2

    STRUCTURE ID (0 = total)  : Dem_4               2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4        Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4        Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
```

```
      Well Rights            :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand              From River By                      From Carrier By
Carried                 ============== ===============================
Structure   River                    ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                               Station Balance
===================================== ==========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_4       Dem_4        1979  OCT   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    56.6     0.0   235.8     0.0     0.0   292.5
0.0     0.0   292.5     0.0 Dem_1            100.000
Dem_4       Dem_4        1979  NOV   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   111.1     0.0   458.1     0.0     0.0   569.2
0.0     0.0   569.2     0.0 Dem_1            100.000
Dem_4       Dem_4        1979  DEC   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    37.0     0.0   463.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1            100.000
Dem_4       Dem_4        1980  JAN   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    12.3     0.0   487.7     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1            100.000
Dem_4       Dem_4        1980  FEB   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     4.1     0.0   495.9     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1            100.000
Dem_4       Dem_4        1980  MAR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     1.4     0.0   498.6     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF              100.000
Dem_4       Dem_4        1980  APR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   499.7     0.0     0.0   499.7
0.0     0.0   499.7     0.0 ISF              100.000
Dem_4       Dem_4        1980  MAY   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  4000.0 NA                -1.000
Dem_4       Dem_4        1980  JUN   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  4000.0 NA                -1.000
Dem_4       Dem_4        1980  JUL   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF              100.000
Dem_4       Dem_4        1980  AUG   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF              100.000
Dem_4       Dem_4        1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF              100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_4       Dem_4        1980  TOT  5500.0  2750.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0  4500.0  2250.0   500.0     0.0   500.0     0.0  8222.6     0.0  5638.7     0.0     0.0 13861.3
1000.0     0.0 12861.3  8000.0 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex9.*
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    STRUCTURE ID (0 = total)  : Dem_5              -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand              From River By                      From Carrier By
Carried                 ============== ===============================
Structure   River                    ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow
```

```
            Station In/Out                               Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5        1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1            100.000
Dem_5       Dem_5        1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1            100.000
Dem_5       Dem_5        1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1            100.000
Dem_5       Dem_5        1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1            100.000
Dem_5       Dem_5        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1            100.000
Dem_5       Dem_5        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF              100.000
Dem_5       Dem_5        1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF              100.000
Dem_5       Dem_5        1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 12000.0 NA                -1.000
Dem_5       Dem_5        1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 12000.0 NA                -1.000
Dem_5       Dem_5        1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF              100.000
Dem_5       Dem_5        1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF              100.000
Dem_5       Dem_5        1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF              100.000
___________ __________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_5       Dem_5        1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0 24000.0 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex9.*
PAGE NO.   4

    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2        Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2        Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand               From River By                  From Carrier By
Carried                 ============== ===============================
Structure   River                      ============== ==============================    From    =====================
Exchange  From  Total   Total    CU            To    Total             Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                               Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2        1979  OCT  3000.0  1500.0  1723.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1723.3  1276.7   638.3   861.7     0.0   861.7     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
1723.3     0.0  1276.7     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2        1979  NOV  3000.0  1500.0  2666.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2666.7   333.3   166.7  1333.3     0.0  1333.3     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2666.7     0.0   333.3     0.0 Cap/Wr_Limit      -1.000
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Dem_2       Dem_2       1979  DEC  3000.0  1500.0  2888.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2888.9   111.1    55.6  1444.4     0.0  1444.4     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2888.9     0.0   111.1     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  JAN  3000.0  1500.0  2963.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2963.0    37.0    18.5  1481.5     0.0  1481.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2963.0     0.0    37.0     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  FEB  3000.0  1500.0  2987.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2987.7    12.3     6.2  1493.8     0.0  1493.8     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2987.7     0.0    12.3     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  MAR  3000.0  1500.0  2995.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2995.9     4.1     2.1  1497.9     0.0  1497.9     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2995.9     0.0     4.1     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  APR  3000.0  1500.0  2730.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2730.9   269.1   134.6  1365.4     0.0  1365.4     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2730.9     0.0   269.1     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  MAY  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0 12000.0 NA                -1.000
Dem_2       Dem_2       1980  JUN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0 12000.0 NA                -1.000
Dem_2       Dem_2       1980  JUL  3000.0  1500.0  2848.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2848.3   151.7    75.8  1424.2     0.0  1424.2     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2848.3     0.0   151.7     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  AUG  3000.0  1500.0  2685.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2685.4   314.6   157.3  1342.7     0.0  1342.7     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2685.4     0.0   314.6     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  SEP  3000.0  1500.0  2653.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2653.6   346.4   173.2  1326.8     0.0  1326.8     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2653.6     0.0   346.4     0.0 Cap/Wr_Limit      -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_2       Dem_2       1980  TOT 36000.0 18000.0 33143.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 33143.5  2856.5  1428.3 16571.7     0.0 16571.7     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
33143.5     0.0 26856.5 24000.0 NA                -1.000


    Gage  Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex9.*
PAGE NO.   5

    RIVER LOCATION - FROM     : Riv_50       Confluence
    RIVER LOCATION - TO       : Riv_50       Confluence



Shortage                 Water Use
                                        Demand               From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================     From    =====================
Exchange  From  Total   Total    CU            To    Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                Station Balance
==================================== =============================================
Reach   Return Well    From/To River    River  River   River    Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow   Divert By Well Outflow Flow  Location Right
NA          Riv_50      1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1569.2     0.0     0.0     0.0     0.0  1569.2
0.0     0.0  1569.2     0.0 NA              -1.000
NA          Riv_50      1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   902.5     0.0     0.0     0.0     0.0   902.5
0.0     0.0   902.5     0.0 NA              -1.000
NA          Riv_50      1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   611.1     0.0     0.0     0.0     0.0   611.1
0.0     0.0   611.1     0.0 NA              -1.000
NA          Riv_50      1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   537.0     0.0     0.0     0.0     0.0   537.0
0.0     0.0   537.0     0.0 NA              -1.000
NA          Riv_50      1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   512.3     0.0     0.0     0.0     0.0   512.3
0.0     0.0   512.3     0.0 NA              -1.000
NA          Riv_50      1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   504.1     0.0     0.0     0.0     0.0   504.1
0.0     0.0   504.1     0.0 NA              -1.000
NA          Riv_50      1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   768.8     0.0     0.0     0.0     0.0   768.8
0.0     0.0   768.8     0.0 NA              -1.000
NA          Riv_50      1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 16000.0     0.0   125.0     0.0     0.0 16125.0
0.0     0.0 16125.0 13130.2 NA              -1.000
NA          Riv_50      1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 16000.0     0.0   250.0     0.0     0.0 16250.0
0.0     0.0 16250.0 13452.4 NA              -1.000
```

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NA          Riv_50       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   651.7     0.0   125.0     0.0     0.0   776.7
0.0     0.0   776.7     0.0 NA              -1.000
NA          Riv_50       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   814.6     0.0     0.0     0.0     0.0   814.6
0.0     0.0   814.6     0.0 NA              -1.000
NA          Riv_50       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   846.4     0.0     0.0     0.0     0.0   846.4
0.0     0.0   846.4     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
NA          Riv_50       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 39717.8     0.0   500.0     0.0     0.0 40217.8
0.0     0.0 40217.8 26582.6 NA              -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex9.*
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    STRUCTURE ID (0 = total)  : Dem_1               5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :      #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :      1     5000.   297525.   307442.
      Diversion Rights        :      1      100.     5950.     6149.
      Well Capacity           :      1        0.        0.        0.
      Well Rights             :      0        0.        0.        0.



Shortage                 Water Use
                                           Demand              From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID          Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
==================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1569.2     0.0   430.8     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                 -1.000
Dem_1       Dem_1        1979  NOV  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   902.5     0.0  1097.5     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                 -1.000
Dem_1       Dem_1        1979  DEC  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   611.1     0.0  1388.9     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                 -1.000
Dem_1       Dem_1        1980  JAN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   537.0     0.0  1463.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                 -1.000
Dem_1       Dem_1        1980  FEB  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   512.3     0.0  1487.7     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                 -1.000
Dem_1       Dem_1        1980  MAR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   504.1     0.0  1495.9     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                 -1.000
Dem_1       Dem_1        1980  APR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   768.8     0.0  1431.7     0.0     0.0  2200.5
2000.0     0.0   200.5     0.0 NA                 -1.000
Dem_1       Dem_1        1980  MAY  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0 16125.0     0.0  1432.7     0.0     0.0 17557.7
2000.0     0.0 15557.7 13130.2 NA                 -1.000
Dem_1       Dem_1        1980  JUN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0 16250.0     0.0  1500.0     0.0     0.0 17750.0
2000.0     0.0 15750.0 13452.4 NA                 -1.000
Dem_1       Dem_1        1980  JUL  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   776.7     0.0  1462.1     0.0     0.0  2238.8
2000.0     0.0   238.8     0.0 NA                 -1.000
Dem_1       Dem_1        1980  AUG  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   814.6     0.0  1383.4     0.0     0.0  2198.0
2000.0     0.0   198.0     0.0 NA                 -1.000
Dem_1       Dem_1        1980  SEP  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   846.4     0.0  1334.7     0.0     0.0  2181.2
2000.0     0.0   181.2     0.0 NA                 -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
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Dem_1       Dem_1        1980  TOT 24000.0  4800.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 24000.0     0.0     0.0  4800.0     0.0 19200.0     0.0 40217.8     0.0 15908.3     0.0     0.0 56126.2
24000.0     0.0 32126.2 26582.6 NA              -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex9.*
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    STRUCTURE ID (0 = total)  : ISF              5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF          Top Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                         Demand               From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU               To    Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
====================================== ======================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF          1979  OCT  4027.5     0.0   640.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   640.0  3387.5     0.0     0.0     0.0   640.0     0.0     0.0     0.0   640.0     0.0     0.0   640.0
640.0     0.0   640.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1979  NOV  3897.6     0.0  1120.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1120.0  2777.6     0.0     0.0     0.0  1120.0     0.0     0.0     0.0  1120.0     0.0     0.0  1120.0
1120.0     0.0  1120.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1979  DEC  4027.5     0.0  1440.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1440.0  2587.5     0.0     0.0     0.0  1440.0     0.0     0.0     0.0  1440.0     0.0     0.0  1440.0
1440.0     0.0  1440.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  JAN  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  FEB  3637.7     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2037.7     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  MAR  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  APR  3897.6     0.0  1800.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1800.5  2097.1     0.0     0.0     0.0  1800.5     0.0   200.5     0.0  1600.0     0.0     0.0  1800.5
1800.5     0.0  1800.5     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  MAY  4027.5     0.0  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0 15557.7     0.0  1600.0     0.0     0.0 17157.7
4027.5     0.0 17157.7 13130.2 NA                -1.000
ISF         ISF          1980  JUN  3897.6     0.0  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0 15750.0     0.0  1600.0     0.0     0.0 17350.0
3897.6     0.0 17350.0 13452.4 NA                -1.000
ISF         ISF          1980  JUL  4027.5     0.0  1838.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1838.8  2188.7     0.0     0.0     0.0  1838.8     0.0   238.8     0.0  1600.0     0.0     0.0  1838.8
1838.8     0.0  1838.8     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  AUG  4027.5     0.0  1798.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1798.0  2229.5     0.0     0.0     0.0  1798.0     0.0   198.0     0.0  1600.0     0.0     0.0  1798.0
1798.0     0.0  1798.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  SEP  3897.6     0.0  1781.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1781.2  2116.4     0.0     0.0     0.0  1781.2     0.0   181.2     0.0  1600.0     0.0     0.0  1781.2
1781.2     0.0  1781.2     0.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
ISF         ISF          1980  TOT 47420.5     0.0 23143.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 23143.5 24277.0     0.0     0.0     0.0 23143.5     0.0 32126.2     0.0 17600.0     0.0     0.0 49726.2
23143.5     0.0 49726.2 26582.6 NA              -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex9.*
PAGE NO.   8

    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
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    STRUCTURE NAME           : Bottom Instream Flow
    RIVER LOCATION - FROM    : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO      : ISF.01       Bottom Instream Flow


Shortage                 Water Use
                                        Demand                From River By                   From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln    Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return     Loss     Inflow

            Station In/Out                                 Station Balance
====================================== =============================================
Reach   Return Well    From/To River    River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow   Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   640.0     0.0     0.0     0.0     0.0   640.0
0.0     0.0   640.0     0.0 NA                -1.000
Baseflow    ISF.01       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1120.0     0.0     0.0     0.0     0.0  1120.0
0.0     0.0  1120.0     0.0 NA                -1.000
Baseflow    ISF.01       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1440.0     0.0     0.0     0.0     0.0  1440.0
0.0     0.0  1440.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1800.5     0.0     0.0     0.0     0.0  1800.5
0.0     0.0  1800.5     0.0 NA                -1.000
Baseflow    ISF.01       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 17157.7     0.0     0.0     0.0     0.0 17157.7
0.0     0.0 17157.7 13130.2 NA                -1.000
Baseflow    ISF.01       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 17350.0     0.0     0.0     0.0     0.0 17350.0
0.0     0.0 17350.0 13452.4 NA                -1.000
Baseflow    ISF.01       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1838.8     0.0     0.0     0.0     0.0  1838.8
0.0     0.0  1838.8     0.0 NA                -1.000
Baseflow    ISF.01       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1798.0     0.0     0.0     0.0     0.0  1798.0
0.0     0.0  1798.0     0.0 NA                -1.000
Baseflow    ISF.01       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1781.2     0.0     0.0     0.0     0.0  1781.2
0.0     0.0  1781.2     0.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Baseflow    ISF.01       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 49726.2     0.0     0.0     0.0     0.0 49726.2
0.0     0.0 49726.2 26582.6 NA                -1.000

#
# ________________________________________________________________________________
# *.xop       Operational Right Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex9.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 12: 8: 4
# Time Step:         Monthly
#
# ________________________________________________________________________________

 Operational Right Summary  ACFT

 ID = Opr_1              Name = Opr_Pro_Rata_Exchange    Opr Type =   24   Admin # =          6.00001
 Source 1 = Dem_2_WR_1   Destination = Dem_3             Year On =     0   Year Off =  9999
YEAR     OCT      NOV      DEC      JAN      FEB      MAR      APR      MAY      JUN      JUL      AUG      SEP      TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980   368.9      0.0      0.0      0.0      0.0      0.0    357.0    368.9    357.0    368.9    368.9    357.0   2546.8
AVG    368.9      0.0      0.0      0.0      0.0      0.0    357.0    368.9    357.0    368.9    368.9    357.0   2546.8
```

---

cdssnews@state.co.us

Last updated: September 2008

Example 10

```
# Exhibit 10.1
# *.rsp; response file for Statemod Example 10
#      This response file lists the StateMod input files necessary for model simulation
#      This response file is the same as ex9.rsp except for changes to address new
#      plan structure and associated operating rules
#
# Type                                      Name
# ______________________________________    _____________________________
Control                                   = ex10.ctl
River_Network                             = ex10.rin
StreamGage_Station                        = ..\ex1\ex1.ris
Stream_Base_Monthly                       = ..\ex1\ex1.rim
Diversion_Station                         = ..\ex1\ex1.dds
Diversion_Right                           = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                  = ..\ex1\ex1.ddm
Instreamflow_Station                      = ..\ex1\ex1.ifs
Instreamflow_Right                        = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly        = ..\ex1\ex1.ifa
Plan_Data                                 = ex10.pln
Operational_Right                         = ex10.opr
DelayTable_Monthly                        = ..\ex1\ex1.urm
OutputRequest                             = ex10.out

# Exhibit 10.2
# ex*.ctl;  Control file for StateMod Example 10
#
#
  STATEMOD
  StateMod Operating Rule Example - ex10.*
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;     ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;       ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       1     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       6     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       1     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       0     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       0     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       1     : isig    Number of significant digits behind decimal point in output files

# Exhibit 10.3
# *.rin; River node network file for StateMod Example 10
#
# *******************************************************
#
#
#  Card 1   Control
```

```
#  format:  (a12, a24, a12, 1x, a12, 1x, f8.0)
#
#  ID           cstaid:  Station ID
#  Name         stanam:  Station name
#  Downstream   cstadn:  Downstream node ID
#  Comment     comment:  Alternate identifier/comment.
#  GWMax        gwmaxr:  Max recharge limit (cfs) - see iwell in control file.
#
#   ID               Name          DownStream     Comment    GWMax
#---------eb----------------------eb----------exb----------exb------e
Dem_3       Exist. Diver. 3/Inflow  Dem_4
Dem_4       Exist. Diver. 4         Riv_50
Dem_5       Exist. Diver. 5/Inflow  Pln_1
Pln_1       Plan Structure          Dem_2
Dem_2       Exist. Diver. 2         Riv_50
Riv_50      Confluence              Dem_1
Dem_1       Exist. Diver. 1         ISF
ISF         Top Instream Flow       ISF.01
ISF.01      Bottom Instream Flow

# Exhibit 10.4
# ex*.pln;  Plan file for StateMod Example 10
#
# *****************************************************
#     Card 1   Control
#     format:  (a12, a24, a12, 5i8)
#
#     Plan ID:              Pid     Include _ instead of blanks
#     Plan Name:            Pname   Include _ instead of blanks
#     Plan Location         iPsta   River node where the plan is located
#     Plan On/Off:          Pon     On (1) or Off (0) switch
#
#     Plan Type             iPlnTyp  1 = Terms and Conditions (T&C)
#                                    2 = Well Augmentation
#                                    3 = Reservoir Reuse
#                                    4 = Non Reservoir Reuse (e.g., WWTP)
#                                    5 = Reuse to a Reservoir from Tmtn
#                                    6 = Reuse to a Diversion from Tmtn
#                                    7 = Transmountain import
#                                    8 = Recharge Plan
#                                    9 = Out-of-Priority Diversion or Storage
#                                   10 = Special Well Augmentation (e.g., Designated Basin, Coffin Wells, etc.)
#                                   11 = Accounting Plan (e.g., changed water rights)
#                                   12 = Release Limit Plan (e.g., HUP Pool Release Limit)
#
#     Plan Efficiency (%)   Peff    Enter 0 if not used
#                                   Enter 1 to read 12 plan efficiency values (%)
#                                   Enter -1 if data is provided in an Operating Rule file (*.opr)
#                                   Enter 999 to use the source structure's efficiency
#     Plan Return Flow ID   iPrf    Enter 0 if not used
#                                   Enter 1 if data is provided in an Plan Return Flow file (*.prf)
#                                   Enter 999 to use the source structure's return flow pattern
#     Plan Failure Switch   iPfail  Used only for a T&C Plan (iPlnTyp = 1)
#                                   Enter 0 to not turn plan off if it fails
#                                   Enter 1 to turn a plan off if it fails
#                                   1 = Do stop and accumulate failures to be paid in subsequent time steps
#     Plan Initial Storage  Psto1   Storage in Plan structure at beginning of simulation
#                                   0 for non-Reuse Reservoir plans (iPlnTyp<>3)
#                                   >= 0 for Reuse Reservoir plans (iPlnTyp=3) - set equal to storage in associated
reservoir (*.res) account
#     Plan Source           Psource Source ID of the structure where plan water becomes available
#                                   Note this information is currently used only when the plan type is
#                                   recharge (type 8) from a reservoir
#     Plan Account          iPAcc   Source Account of the structure where plan water becomes available
#                                   Note this information is currently used only when the plan type is
#                                   recharge (type 8) from a reservoir
#
#
# ID        Name                    RiverLoc      ON/Off  iPtype    Peff    iPrf  iPfail   Psto1 Psource     IPAcc
#----------eb----------------------eb----------eb------eb------eb------eb------eb------eb------exb----------eb------e
Pln_1       AccountingPlan          Pln_1              1      11       0       0       0       0 Dem_2         0

# Exhibit 10.5
# *.opr; operating rules file for Statemod Example 10
#      This file lists the operating rules used in model simulation
#
#
#                    GUIDE TO COLUMN ENTRIES
#     ========================================
#          ID            ID number of operating rule that is used to separate operating rule output in *.xop file
#          Name       Name of operating rule - used for descriptive purposes only
#          Admin#     Administration number used to determine priority of operational water rights relative to other
operations and direct diversion, reservoir, instream flow, and well rights (see tabulation in *.xwr file)
#          # Str      Number of carrier structures, monthly on/off switches, or monthly volumetrics (flag telling
StateMod program the number of entries on next line)
#          On/Off     1 for ON and 0 for OFF
#          Dest ID    Destination of operating rule whose demand is to be met by simulating the operating rule
#          Dest Ac    Account at destination to be met by operating rule - typically 1 for a diversion structure and
account number for reservoir destination
```

```
#         Sou1 ID    ID number of primary source of water under which water right is being diverted in operating rule
- typically a water right, reservoir, or Plan structure
#         Sou1 Ac    Account of Sou1 - typically 1 for a diversion structure and account number for reservoir source
#         Sou2 ID    ID of Plan where reusable storage water or reusable ditch credits is accounted
#         Sou2 Ac    Percentage of Plan supplies available for operation
#         Type       Rule type corresponding with definitions in Chapter 4 of StateMod documentation
#         ReusePlan  ID of Plan where reusable return flows or diversions to storage are accounted
#         Div Type   'Diversion' indicates pro-rata diversion of source water right priority or exchange of reusable
credits to Dest1
#                       'Depletion' indicates pro-rata diversion of source water right priority consumptive use or
augmentation of upstream diversions at Dest1
#         OprLoss    Percentage of simulated diversion lost in carrier ditch (only applies to certain rules - see
StateMod documentation, Section 4.13)
#         Limit      Capacity limit for carrier structures different from capacity in .dds file (used to represent
constricted conveyance capacity for winter deliveries to reservoirs)
#         Comments   Description of rule type
#
# ID        Name                      NA                    Admin#   # Str  On/Off Dest Id     Dest Ac  Sou1 Id     Sou1
Ac  Sou2 Id     Sou2 Ac     Type ReusePlan    Div Type      OprLoss   Limit Comments
# ---------eb----------------------eb----------exxxxb----------eb------eb------e-b----------eb------e-b----------eb---
---e-b----------eb------eb------exb----------exb----------exb------eb------exb----------
Opr_1       Opr_Pro_Rata_Exchange_to_AcctPlan           6.00001      0.       1 Pln_1             1 Dem_2_WR_1
10 NA              0      24 NA           Diversion           0       0       0    9999 Direct Flow Exchange of
Pro-Rata Water Right
     5000.      0.      0.      0.      0.      0.   5000.   5000.   5000.   5000.   5000.   5000.  35000.0
Opr_2       Opr_AcctPlan_Release                        6.00002      0.       1 Dem_3             1 Pln_1
100 NA             0      28 NA           Diversion           0       0       0    9999 Accounting Plan to Demand
by Exchange
Opr_3       Opr_AcctPlan_Spill                      99999.00000      0.       1 NA                0 Pln_1
0 NA               0      29 NA           NA                  0       0       0    9999 spill Acct_Plan

# Exhibit 10.6
# *.out; Output request file for StateMod Example 10
#
# Type (e.g. Diversion, StreamGage, Reservoir, InstreamFlow, Well or All)
#
All
#
# Parameter (e.g. Total_Supply, Sim_EOM, River_Outflow or All)
#
All
#
# ID Name Type and Print Code (0=no, 1=yes);
# Note: id = All prints all
#       id = -999 = stop
#       default is to turn on all stream gages (FLO)
#
All
Dem_3       Exist. Diver. 3/Inflow     DIV     1
Dem_4       Exist. Diver. 4            DIV     1
Dem_5       Exist. Diver. 5/Inflow     DIV     1
Pln_1       Plan Structure             OTH     1
Dem_2       Exist. Diver. 2            DIV     1
Riv_50      Confluence                 OTH     1
Dem_1       Exist. Diver. 1            DIV     1
ISF         Top Instream Flow          ISF     1
ISF.01      Bottom Instream Flow       ISF     1
-999

#
# _________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex10.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 12:43:32
# Time Step:         Monthly
#
# _________________________________________________________________________________

                               Water Budget  ACFT

              Stream                    From/To      From       From       Total                 From River
Well    Reservoir  Reservoir    Stream   Reservoir            To       SoilM
Year   Mo      Inflow      Return      GWStorage      SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change        SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
1979 OCT       4000.0     1297.8          0.0          0.0      368.9      5666.7      5000.0         0.0         0.0
0.0         0.0      666.7         0.0          0.0         0.0      5666.7         0.0      1715.5         0.0
0.0         0.0
 1979 NOV       4000.0      2663.7          0.0          0.0          0.0      6663.7      5543.7         0.0         0.0
0.0         0.0     1120.0         0.0          0.0         0.0      6663.7         0.0      2171.8         0.0
0.0         0.0
```

Year	Mo	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1979	DEC	4000.0	3287.9	0.0	0.0	0.0	7287.9	5847.9	0.0	0.0	0.0	0.0	1440.0	0.0	0.0	0.0	7287.9	0.0	2323.9	0.0	0.0	0.0
1980	JAN	4000.0	3549.3	0.0	0.0	0.0	7549.3	5949.3	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7549.3	0.0	2374.6	0.0	0.0	0.0
1980	FEB	4000.0	3583.1	0.0	0.0	0.0	7583.1	5983.1	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7583.1	0.0	2391.6	0.0	0.0	0.0
1980	MAR	4000.0	3594.4	0.0	0.0	0.0	7594.4	5994.4	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7594.4	0.0	2397.2	0.0	0.0	0.0
1980	APR	4000.0	3509.0	0.0	0.0	357.0	7866.0	5998.6	0.0	0.0	0.0	0.0	1867.4	0.0	0.0	0.0	7866.0	0.0	2220.8	0.0	0.0	0.0
1980	MAY	20000.0	3635.4	0.0	0.0	368.9	24004.3	6868.9	0.0	0.0	0.0	0.0	17135.4	0.0	0.0	0.0	24004.3	0.0	2650.0	0.0	0.0	0.0
1980	JUN	20000.0	3850.0	0.0	0.0	357.0	24207.0	6857.0	0.0	0.0	0.0	0.0	17350.0	0.0	0.0	0.0	24207.0	0.0	2650.0	0.0	0.0	0.0
1980	JUL	4000.0	3632.8	0.0	0.0	368.9	8001.7	6000.0	0.0	0.0	0.0	0.0	2001.7	0.0	0.0	0.0	8001.7	0.0	2215.5	0.0	0.0	0.0
1980	AUG	4000.0	3392.5	0.0	0.0	368.9	7761.4	5907.8	0.0	0.0	0.0	0.0	1853.6	0.0	0.0	0.0	7761.4	0.0	2169.4	0.0	0.0	0.0
1980	SEP	4000.0	3366.6	0.0	0.0	357.0	7723.7	5884.7	0.0	0.0	0.0	0.0	1838.9	0.0	0.0	0.0	7723.7	0.0	2163.8	0.0	0.0	0.0
1980	Tot	80000.0	39362.4	0.0	0.0	2546.8	121909.2	71835.4	0.0	0.0	0.0	0.0	50073.8	0.0	0.0	0.0	121909.2	0.0	27444.3	0.0	0.0	0.0

Water Budget ACFT

```
                 Stream                From/To       From        From       Total             From River       Well
Reservoir   Reservoir      Stream    Reservoir          To       SoilM       Total
 Year   Mo       Inflow       Return   GWStorage        SoilM    Plan (5)      Inflow  Divert (6)     by Well   Depletion
Evaporation      Seepage     Outflow      Change        SoilM      Change     Outflow       Delta      CU (1)     Loss
(2) Pumping (3) Salvage (4)
```

Year	Mo	(1) (+)	(2) (+)	(3) (+)	(4) (+)	(5) (+)	(6) NA	(7) (-)	(8) (-)	(9) (-)	(10) (-)	(11) (-)	(12) (-)	(13) (-)	(14) (-)	(15) (-)	(16) NA	(17) NA	(18) NA	(19) NA	(20) NA	(21) NA
Ave	OCT	4000.0	1297.8	0.0	0.0	368.9	5666.7	5000.0	0.0	0.0	0.0	0.0	666.7	0.0	0.0	0.0	5666.7	0.0	1715.5	0.0	0.0	0.0
Ave	NOV	4000.0	2663.7	0.0	0.0	0.0	6663.7	5543.7	0.0	0.0	0.0	0.0	1120.0	0.0	0.0	0.0	6663.7	0.0	2171.8	0.0	0.0	0.0
Ave	DEC	4000.0	3287.9	0.0	0.0	0.0	7287.9	5847.9	0.0	0.0	0.0	0.0	1440.0	0.0	0.0	0.0	7287.9	0.0	2323.9	0.0	0.0	0.0
Ave	JAN	4000.0	3549.3	0.0	0.0	0.0	7549.3	5949.3	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7549.3	0.0	2374.6	0.0	0.0	0.0
Ave	FEB	4000.0	3583.1	0.0	0.0	0.0	7583.1	5983.1	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7583.1	0.0	2391.6	0.0	0.0	0.0
Ave	MAR	4000.0	3594.4	0.0	0.0	0.0	7594.4	5994.4	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7594.4	0.0	2397.2	0.0	0.0	0.0
Ave	APR	4000.0	3509.0	0.0	0.0	357.0	7866.0	5998.6	0.0	0.0	0.0	0.0	1867.4	0.0	0.0	0.0	7866.0	0.0	2220.8	0.0	0.0	0.0
Ave	MAY	20000.0	3635.4	0.0	0.0	368.9	24004.3	6868.9	0.0	0.0	0.0	0.0	17135.4	0.0	0.0	0.0	24004.3	0.0	2650.0	0.0	0.0	0.0
Ave	JUN	20000.0	3850.0	0.0	0.0	357.0	24207.0	6857.0	0.0	0.0	0.0	0.0	17350.0	0.0	0.0	0.0	24207.0	0.0	2650.0	0.0	0.0	0.0
Ave	JUL	4000.0	3632.8	0.0	0.0	368.9	8001.7	6000.0	0.0	0.0	0.0	0.0	2001.7	0.0	0.0	0.0	8001.7	0.0	2215.5	0.0	0.0	0.0
Ave	AUG	4000.0	3392.5	0.0	0.0	368.9	7761.4	5907.8	0.0	0.0	0.0	0.0	1853.6	0.0	0.0	0.0	7761.4	0.0	2169.4	0.0	0.0	0.0
Ave	SEP	4000.0	3366.6	0.0	0.0	357.0	7723.7	5884.7	0.0	0.0	0.0	0.0	1838.9	0.0	0.0	0.0	7723.7	0.0	2163.8	0.0	0.0	0.0

```
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
Ave   Tot      80000.0     39362.4         0.0         0.0      2546.8    121909.2     71835.4         0.0         0.0
0.0         0.0     50073.8         0.0         0.0         0.0    121909.2         0.0     27444.3         0.0
0.0         0.0

  Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency
           + max (Resevoir Evaporation (Evap), 0.0).
        (2) Loss is not part of the Stream Water Balance.
            It is the portion of a diversion, well pumping
            and reservoir seepage that does not return to
            the stream
        (3) Pumping is not part of the Stream Balance.
            Its impact on the stream is included in the From River by Well and Well Depletion columns
        (4) Salvage is not part of the Stream Water Balance.
            It is the portion of well pumping that does not impact the stream
        (5) From Plan is water from a reuse plan.
        (6) Divert does not include diversions by an
            instream flow or a T&C plan. Also to avoid
            double accounting with reservoir storage it has
            reduced by:
              1       0. af/yr for Diverted to Storage.
              2       0. af/yr for a Diversion Carrier.
              3       0. af/yr for a Reservior Carrier.
              4       0. af/yr for a Plan Carrier.
                      0. af/yr Total

#
# _____________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex10.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 12:43:29
# Time Step:         Monthly
#
# _____________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =         9
#
#
_______________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
            operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID               Type         Admin #  On/Off  Str ID #1    Str ID #2           Amount Right Name
Str Name #1               Str Name #2
#    (1) (2)               (3)             (4)     (5)  (6)          (7)                    (8) (9)
(10)                       (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

       1 Dem_1_WR_1          3         2.00000       1  Dem_1        -1              100.000 c M&I Demand _1
Municipal Demand _1
       2 Dem_2_WR_1          3         6.00000       0  Dem_2        -1               60.000 c Irrigation Demand _2
Irrigation Demand _2

       3 Opr_1             124         6.00001       1  -1           -1               -1.000 x
Opr_Pro_Rata_Exchange_to
```

```
       4 Opr_2             128         6.00002       1  -1           -1               -1.000 x Opr_AcctPlan_Release

       5 Dem_3_WR_1          3         7.00000       1  Dem_3        -1              100.000 c Irrigation Demand _3
Irrigation Demand _3
       6 ISF_WR_1            1         9.00000       1  ISF          -1               65.500 c Instream Flow 1
Instream Demand
       7 Dem_4_WR_1          3        10.00000       1  Dem_4        -1              100.000 c Irrigation Demand _4
Irrigation Demand _4
       8 Dem_5_WR_1          3        15.00000       1  Dem_5        -1              100.000 c Irrigation Demand _5
Irrigation Demand _5

       9 Opr_3             129     99999.00000       1  -1           -1               -1.000 x Opr_AcctPlan_Spill
#
# _________________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex10.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 12:43:24
# Time Step:         Monthly
#
# _________________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex10.*
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                         Demand               From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3        1979  OCT  1000.0   500.0   631.1     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1979  NOV  1000.0   500.0   885.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   885.9   114.1    57.0   443.0     0.0   443.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
885.9    0.0   114.1     0.0 Dem_1           100.000
Dem_3       Dem_3        1979  DEC  1000.0   500.0   962.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   962.0    38.0    19.0   481.0     0.0   481.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
962.0    0.0    38.0     0.0 Dem_1           100.000
Dem_3       Dem_3        1980  JAN  1000.0   500.0   987.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   987.3    12.7     6.3   493.7     0.0   493.7     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
987.3    0.0    12.7     0.0 Dem_1           100.000
Dem_3       Dem_3        1980  FEB  1000.0   500.0   995.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   995.8     4.2     2.1   497.9     0.0   497.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
995.8    0.0     4.2     0.0 Dem_1           100.000
Dem_3       Dem_3        1980  MAR  1000.0   500.0   998.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   998.6     1.4     0.7   499.3     0.0   499.3     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
998.6    0.0     1.4     0.0 Dem_1           100.000
Dem_3       Dem_3        1980  APR  1000.0   500.0   643.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3        1980  MAY  1000.0   500.0   631.1     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  4000.0 NA                -1.000
Dem_3       Dem_3        1980  JUN  1000.0   500.0   643.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  4000.0 NA                -1.000
Dem_3       Dem_3        1980  JUL  1000.0   500.0   631.1     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
```

```
Dem_3       Dem_3       1980  AUG  1000.0   500.0   631.1     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_3       Dem_3       1980  SEP  1000.0   500.0   643.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_3       Dem_3       1980  TOT 12000.0  6000.0  9282.8     0.0  2546.8     0.0     0.0     0.0     0.0     0.0
0.0     0.0 11829.6   170.4    85.2  5914.8     0.0  5914.8     0.0     0.0 20000.0     0.0     0.0     0.0 20000.0
11829.6     0.0  8170.4  8000.0 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex10.*
PAGE NO.   2

    STRUCTURE ID (0 = total)  : Dem_4              2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4        Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4        Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                         Demand               From River By                   From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== =============================================
Dem_4       Dem_4       1979  OCT   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   250.0     0.0     0.0   250.0
0.0     0.0   250.0     0.0 ISF           100.000
Dem_4       Dem_4       1979  NOV   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   114.1     0.0   471.5     0.0     0.0   585.6
0.0     0.0   585.6     0.0 ISF           100.000
Dem_4       Dem_4       1979  DEC   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    38.0     0.0   462.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1         100.000
Dem_4       Dem_4       1980  JAN   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    12.7     0.0   487.3     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1         100.000
Dem_4       Dem_4       1980  FEB   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     4.2     0.0   495.8     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1         100.000
Dem_4       Dem_4       1980  MAR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     1.4     0.0   498.6     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1         100.000
Dem_4       Dem_4       1980  APR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   499.6     0.0     0.0   499.6
0.0     0.0   499.6     0.0 ISF           100.000
Dem_4       Dem_4       1980  MAY   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  4000.0 NA              -1.000
Dem_4       Dem_4       1980  JUN   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  4000.0 NA              -1.000
Dem_4       Dem_4       1980  JUL   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF           100.000
Dem_4       Dem_4       1980  AUG   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF           100.000
Dem_4       Dem_4       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF           100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_4       Dem_4       1980  TOT  5500.0  2750.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0  4500.0  2250.0   500.0     0.0   500.0     0.0  8170.4     0.0  5664.8     0.0     0.0 13835.2
1000.0     0.0 12835.2  8000.0 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
```

```
    STRUCTURE ID (0 = total)  : Dem_5              -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand               From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                 ============== ==============================    From    =====================
Exchange  From  Total   Total    CU               To    Total           Upstrm
ID         ID          Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
===================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF            100.000
Dem_5       Dem_5       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF            100.000
Dem_5       Dem_5       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1          100.000
Dem_5       Dem_5       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1          100.000
Dem_5       Dem_5       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1          100.000
Dem_5       Dem_5       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1          100.000
Dem_5       Dem_5       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF            100.000
Dem_5       Dem_5       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 12000.0 NA              -1.000
Dem_5       Dem_5       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 12000.0 NA              -1.000
Dem_5       Dem_5       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF            100.000
Dem_5       Dem_5       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF            100.000
Dem_5       Dem_5       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF            100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________

Dem_5       Dem_5       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0 24000.0 NA              -1.000
```

Diversion Summary ACFT
STATEMOD


```
    STRUCTURE ID (0 = total)  : Pln_1           10001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : AccountingPlan
    RIVER LOCATION - FROM     : Pln_1        Plan Structure
    RIVER LOCATION - TO       : Pln_1        Plan Structure



Shortage                 Water Use
```

```
                                        Demand              From River By                     From Carrier By
Carried                  ============== ==============================
Structure   River                    ============== ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                  Station Balance
====================================== ==============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Pln_1       Pln_1       1979  OCT     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
368.9    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA              -1.000
Pln_1       Pln_1       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA              -1.000
Pln_1       Pln_1       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA              -1.000
Pln_1       Pln_1       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA              -1.000
Pln_1       Pln_1       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA              -1.000
Pln_1       Pln_1       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA              -1.000
Pln_1       Pln_1       1980  APR     0.0     0.0     0.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
357.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA              -1.000
Pln_1       Pln_1       1980  MAY     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
368.9    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 12000.0 NA              -1.000
Pln_1       Pln_1       1980  JUN     0.0     0.0     0.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
357.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 12000.0 NA              -1.000
Pln_1       Pln_1       1980  JUL     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
368.9    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA              -1.000
Pln_1       Pln_1       1980  AUG     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
368.9    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA              -1.000
Pln_1       Pln_1       1980  SEP     0.0     0.0     0.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
357.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Pln_1       Pln_1       1980  TOT     0.0     0.0     0.0     0.0  2546.8     0.0     0.0     0.0     0.0     0.0
2546.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0 24000.0 NA              -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex10.*
PAGE NO.   5

    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2        Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2        Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                  ============== ==============================
Structure   River                    ============== ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                  Station Balance
====================================== ==============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
```

```
Dem_2       Dem_2       1979  OCT  3000.0  1500.0  1631.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1631.1  1368.9   684.5   815.5     0.0   815.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
1631.1     0.0  1368.9     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1979  NOV  3000.0  1500.0  2657.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2657.8   342.2   171.1  1328.9     0.0  1328.9     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2657.8     0.0   342.2     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1979  DEC  3000.0  1500.0  2885.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2885.9   114.1    57.0  1443.0     0.0  1443.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2885.9     0.0   114.1     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  JAN  3000.0  1500.0  2962.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2962.0    38.0    19.0  1481.0     0.0  1481.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2962.0     0.0    38.0     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  FEB  3000.0  1500.0  2987.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2987.3    12.7     6.3  1493.7     0.0  1493.7     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2987.3     0.0    12.7     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  MAR  3000.0  1500.0  2995.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2995.8     4.2     2.1  1497.9     0.0  1497.9     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2995.8     0.0     4.2     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  APR  3000.0  1500.0  2641.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2641.6   358.4   179.2  1320.8     0.0  1320.8     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2641.6     0.0   358.4     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  MAY  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0 12000.0 NA                -1.000
Dem_2       Dem_2       1980  JUN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0 12000.0 NA                -1.000
Dem_2       Dem_2       1980  JUL  3000.0  1500.0  2631.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2631.1   368.9   184.5  1315.5     0.0  1315.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2631.1     0.0   368.9     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  AUG  3000.0  1500.0  2538.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2538.8   461.2   230.6  1269.4     0.0  1269.4     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2538.8     0.0   461.2     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  SEP  3000.0  1500.0  2527.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2527.7   472.3   236.2  1263.8     0.0  1263.8     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2527.7     0.0   472.3     0.0 Cap/Wr_Limit      -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_2       Dem_2       1980  TOT 36000.0 18000.0 32459.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 32459.0  3541.0  1770.5 16229.5     0.0 16229.5     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
32459.0     0.0 27541.0 24000.0 NA                -1.000

    Gage  Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex10.*
PAGE NO.   6

    RIVER LOCATION - FROM     : Riv_50       Confluence
    RIVER LOCATION - TO       : Riv_50       Confluence


Shortage                 Water Use
                                        Demand              From River By                  From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                  Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
NA          Riv_50      1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1618.9     0.0     0.0     0.0     0.0  1618.9
0.0     0.0  1618.9     0.0 NA              -1.000
NA          Riv_50      1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   927.8     0.0     0.0     0.0     0.0   927.8
0.0     0.0   927.8     0.0 NA              -1.000
NA          Riv_50      1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   614.1     0.0     0.0     0.0     0.0   614.1
0.0     0.0   614.1     0.0 NA              -1.000
NA          Riv_50      1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   538.0     0.0     0.0     0.0     0.0   538.0
0.0     0.0   538.0     0.0 NA              -1.000
NA          Riv_50      1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   512.7     0.0     0.0     0.0     0.0   512.7
0.0     0.0   512.7     0.0 NA              -1.000
NA          Riv_50      1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   504.2     0.0     0.0     0.0     0.0   504.2
0.0     0.0   504.2     0.0 NA              -1.000
NA          Riv_50      1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   858.1     0.0     0.0     0.0     0.0   858.1
0.0     0.0   858.1     0.0 NA              -1.000
NA          Riv_50      1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 16000.0     0.0   125.0     0.0     0.0 16125.0
0.0     0.0 16125.0 13107.9 NA              -1.000
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NA          Riv_50       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 16000.0     0.0   250.0     0.0     0.0 16250.0
0.0     0.0 16250.0 13452.4 NA              -1.000
NA          Riv_50       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   868.9     0.0   125.0     0.0     0.0   993.9
0.0     0.0   993.9     0.0 NA              -1.000
NA          Riv_50       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   961.2     0.0     0.0     0.0     0.0   961.2
0.0     0.0   961.2     0.0 NA              -1.000
NA          Riv_50       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   972.3     0.0     0.0     0.0     0.0   972.3
0.0     0.0   972.3     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
NA          Riv_50       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 40376.2     0.0   500.0     0.0     0.0 40876.2
0.0     0.0 40876.2 26560.3 NA              -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex10.*
PAGE NO.   7

    STRUCTURE ID (0 = total)  : Dem_1              5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand             From River By                  From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total    Total    CU              To     Total            Upstrm
ID          ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                               Station Balance
=================================== ========================================
Reach   Return Well    From/To River   River  River   River    Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1618.9     0.0   407.8     0.0     0.0  2026.7
2000.0     0.0    26.7     0.0 NA              -1.000
Dem_1       Dem_1        1979  NOV  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   927.8     0.0  1072.2     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1979  DEC  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   614.1     0.0  1385.9     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  JAN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   538.0     0.0  1462.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  FEB  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   512.7     0.0  1487.3     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  MAR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   504.2     0.0  1495.8     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  APR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   858.1     0.0  1409.3     0.0     0.0  2267.4
2000.0     0.0   267.4     0.0 NA              -1.000
Dem_1       Dem_1        1980  MAY  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0 16125.0     0.0  1410.4     0.0     0.0 17535.4
2000.0     0.0 15535.4 13107.9 NA              -1.000
Dem_1       Dem_1        1980  JUN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0 16250.0     0.0  1500.0     0.0     0.0 17750.0
2000.0     0.0 15750.0 13452.4 NA              -1.000
Dem_1       Dem_1        1980  JUL  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   993.9     0.0  1407.8     0.0     0.0  2401.7
2000.0     0.0   401.7     0.0 NA              -1.000
Dem_1       Dem_1        1980  AUG  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   961.2     0.0  1292.5     0.0     0.0  2253.6
2000.0     0.0   253.6     0.0 NA              -1.000
Dem_1       Dem_1        1980  SEP  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   972.3     0.0  1266.6     0.0     0.0  2239.0
2000.0     0.0   238.9     0.0 NA              -1.000
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___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_1       Dem_1        1980  TOT 24000.0  4800.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 24000.0     0.0     0.0  4800.0     0.0 19200.0     0.0 40876.2     0.0 15597.6     0.0     0.0 56473.8
24000.0     0.0 32473.8 26560.3 NA                -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex10.*
PAGE NO.   8

    STRUCTURE ID (0 = total)  : ISF              5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF         Top Instream Flow
    RIVER LOCATION - TO       : ISF.01      Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                     ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
====================================== =========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF          1979  OCT  4027.5     0.0   666.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   666.7  3360.8     0.0     0.0     0.0   666.7     0.0    26.7     0.0   640.0     0.0     0.0   666.7
666.7     0.0   666.7     0.0 Hgate_Limit       -1.000
ISF         ISF          1979  NOV  3897.6     0.0  1120.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1120.0  2777.6     0.0     0.0     0.0  1120.0     0.0     0.0     0.0  1120.0     0.0     0.0  1120.0
1120.0     0.0  1120.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1979  DEC  4027.5     0.0  1440.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1440.0  2587.5     0.0     0.0     0.0  1440.0     0.0     0.0     0.0  1440.0     0.0     0.0  1440.0
1440.0     0.0  1440.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  JAN  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  FEB  3637.7     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2037.7     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  MAR  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  APR  3897.6     0.0  1867.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1867.4  2030.2     0.0     0.0     0.0  1867.4     0.0   267.4     0.0  1600.0     0.0     0.0  1867.4
1867.4     0.0  1867.4     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  MAY  4027.5     0.0  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0 15535.4     0.0  1600.0     0.0     0.0 17135.4
4027.5     0.0 17135.4 13107.9 NA                -1.000
ISF         ISF          1980  JUN  3897.6     0.0  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0 15750.0     0.0  1600.0     0.0     0.0 17350.0
3897.6     0.0 17350.0 13452.4 NA                -1.000
ISF         ISF          1980  JUL  4027.5     0.0  2001.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2001.7  2025.8     0.0     0.0     0.0  2001.7     0.0   401.7     0.0  1600.0     0.0     0.0  2001.7
2001.7     0.0  2001.7     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  AUG  4027.5     0.0  1853.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1853.6  2173.9     0.0     0.0     0.0  1853.6     0.0   253.6     0.0  1600.0     0.0     0.0  1853.6
1853.6     0.0  1853.6     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  SEP  3897.6     0.0  1838.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1838.9  2058.6     0.0     0.0     0.0  1838.9     0.0   238.9     0.0  1600.0     0.0     0.0  1838.9
1838.9     0.0  1838.9     0.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
ISF         ISF          1980  TOT 47420.5     0.0 23513.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 23513.5 23907.0     0.0     0.0     0.0 23513.5     0.0 32473.8     0.0 17600.0     0.0     0.0 50073.8
23513.5     0.0 50073.8 26560.3 NA                -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex10.*
PAGE NO.   9

    STRUCTURE ID (0 = total)  : Baseflow       -10003
```

```
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME           : Bottom Instream Flow
    RIVER LOCATION - FROM    : ISF.01      Bottom Instream Flow
    RIVER LOCATION - TO      : ISF.01      Bottom Instream Flow


Shortage                 Water Use
                                        Demand               From River By                        From Carrier By
Carried                 ============== ===============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU            To    Total           Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                  Station Balance
====================================== =============================================
Reach   Return Well    From/To River    River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01      1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   666.7     0.0     0.0     0.0     0.0   666.7
0.0     0.0   666.7     0.0 NA                -1.000
Baseflow    ISF.01      1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1120.0     0.0     0.0     0.0     0.0  1120.0
0.0     0.0  1120.0     0.0 NA                -1.000
Baseflow    ISF.01      1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1440.0     0.0     0.0     0.0     0.0  1440.0
0.0     0.0  1440.0     0.0 NA                -1.000
Baseflow    ISF.01      1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01      1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01      1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA                -1.000
Baseflow    ISF.01      1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1867.4     0.0     0.0     0.0     0.0  1867.4
0.0     0.0  1867.4     0.0 NA                -1.000
Baseflow    ISF.01      1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 17135.4     0.0     0.0     0.0     0.0 17135.4
0.0     0.0 17135.4 13107.9 NA                -1.000
Baseflow    ISF.01      1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 17350.0     0.0     0.0     0.0     0.0 17350.0
0.0     0.0 17350.0 13452.4 NA                -1.000
Baseflow    ISF.01      1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2001.7     0.0     0.0     0.0     0.0  2001.7
0.0     0.0  2001.7     0.0 NA                -1.000
Baseflow    ISF.01      1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1853.6     0.0     0.0     0.0     0.0  1853.6
0.0     0.0  1853.6     0.0 NA                -1.000
Baseflow    ISF.01      1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1838.9     0.0     0.0     0.0     0.0  1838.9
0.0     0.0  1838.9     0.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Baseflow    ISF.01      1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 50073.8     0.0     0.0     0.0     0.0 50073.8
0.0     0.0 50073.8 26560.3 NA                -1.000
#
# ________________________________________________________________________________
# *.xpl       Plan
#
#   STATEMOD
#   StateMod Operating Rule Example - ex10.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 12:43:24
# Time Step:         Monthly
#
# ________________________________________________________________________________


Plan Summary    ACFT
Plan Number    =     1
Plan Type      =    11 Accounting_Plan
Plan ID        = Pln_1
Plan Name      = AccountingPlan
Plan Source    = Dem_2

Use   1   ID = Opr_2          Name = Opr_AcctPlan_Release       Opr Type =  28   Destination = Dem_3          Status =
On
Use   2   ID = Opr_3          Name = Opr_AcctPlan_Spill         Opr Type =  29   Destination = NA             Status =
On

                                            Plan Uses
```

```
Plan        River         Year  Mo  Supply
=======================================================================================================================
===============================
ID          ID                      Total   Use 1   Use 2   Use 3   Use 4   Use 5   Use 6   Use 7   Use 8   Use 9  Use
10  Use 11  Use 12  Use 13  Use 14  Use 15  Use 16  Use 17  Use 18  Use 19

   Plan Uses
===============
Use 20   Total
Pln_1        Pln_1        1979  OCT   368.9   368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0   368.9
Pln_1        Pln_1        1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  APR   357.0   357.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0   357.0
Pln_1        Pln_1        1980  MAY   368.9   368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0   368.9
Pln_1        Pln_1        1980  JUN   357.0   357.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0   357.0
Pln_1        Pln_1        1980  JUL   368.9   368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0   368.9
Pln_1        Pln_1        1980  AUG   368.9   368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0   368.9
Pln_1        Pln_1        1980  SEP   357.0   357.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0   357.0
____________ ____________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Pln_1        Pln_1        1980  TOT  2546.8  2546.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    0.0     0.0     0.0     0.0     0.0     0.0     0.0  2546.8
#
# ________________________________________________________________________________
# *.xop       Operational Right Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex10.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 12:43:24
# Time Step:         Monthly
#
# ________________________________________________________________________________

 Operational Right Summary  ACFT

 ID = Opr_1                Name = Opr_Pro_Rata_Exchange_to Opr Type =   24   Admin # =          6.00001
 Source 1 = Dem_2_WR_1     Destination = Pln_1             Year On =     0   Year Off =   9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980   368.9     0.0     0.0     0.0     0.0     0.0   357.0   368.9   357.0   368.9   368.9   357.0  2546.8
AVG    368.9     0.0     0.0     0.0     0.0     0.0   357.0   368.9   357.0   368.9   368.9   357.0  2546.8

 Operational Right Summary  ACFT

 ID = Opr_2                Name = Opr_AcctPlan_Release     Opr Type =   28   Admin # =          6.00002
 Source 1 = Pln_1          Destination = Dem_3             Year On =     0   Year Off =   9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980   368.9     0.0     0.0     0.0     0.0     0.0   357.0   368.9   357.0   368.9   368.9   357.0  2546.8
AVG    368.9     0.0     0.0     0.0     0.0     0.0   357.0   368.9   357.0   368.9   368.9   357.0  2546.8

 Operational Right Summary  ACFT

 ID = Opr_3                Name = Opr_AcctPlan_Spill       Opr Type =   29   Admin # =      99999.00000
 Source 1 = Pln_1          Destination = NA                Year On =     0   Year Off =   9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
AVG      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
```

Example 11

```
# Exhibit 11.1
# *.rsp; response file for Statemod Example 11
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                        Name
# ________________________________________  _____________________________
Control                                    = ex11.ctl
River_Network                              = ex11.rin
StreamGage_Station                         = ..\ex1\ex1.ris
Stream_Base_Monthly                        = ..\ex1\ex1.rim
Diversion_Station                          = ex11.dds
Diversion_Right                            = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                   = ..\ex1\ex1.ddm
Reservoir_Station                          = ..\ex2\ex2.res
Reservoir_Right                            = ..\ex2\ex2.rer
Reservoir_Target_Monthly                   = ..\ex2\ex2.tam
Evaporation_Monthly                        = ..\ex2\ex2.eva
Instreamflow_Station                       = ..\ex1\ex1.ifs
Instreamflow_Right                         = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly         = ..\ex1\ex1.ifa
Plan_Data                                  = ex11.pln
Plan_Return                                = ex11.prf
Operational_Right                          = ex11.opr
DelayTable_Monthly                         = ..\ex1\ex1.urm
OutputRequest                              = ex11.out

# Exhibit 11.2
# ex*.ctl;  Control file for StateMod Example 11
#
#
  STATEMOD
  StateMod Operating Rule Example - ex11.*
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;    ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;      ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       1     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       6     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       1     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       0     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       0     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       1     : isig    Number of significant digits behind decimal point in output files

# Exhibit 11.3
# *.rin; River node network file for StateMod Example 11
#
# *******************************************************
```

```
#
#
#  Card 1   Control
#  format:  (a12, a24, a12, 1x, a12, 1x, f8.0)
#
#  ID           cstaid:  Station ID
#  Name         stanam:  Station name
#  Downstream   cstadn:  Downstream node ID
#  Comment     comment:  Alternate identifier/comment.
#  GWMax        gwmaxr:  Max recharge limit (cfs) - see iwell in control file.
#
#   ID                Name          DownStream     Comment    GWMax
#---------eb----------------------eb----------exb----------exb------e
Dem_3       Exist. Diver. 3/Inflow  Dem_4
Dem_4       Exist. Diver. 4         T&CPln_1
Dem_5       Exist. Diver. 5/Inflow  Pln_1
Pln_1       Plan Structure          Dem_2
Dem_2       Exist. Diver. 2         Res_1
Res_1       Exist. Reservoir        T&CPln_1
T&CPln_1    T&C Plan                Dem_1
Dem_1       Exist. Diver. 1         ISF
ISF         Top Instream Flow       ISF.01
ISF.01      Bottom Instream Flow

# Exhibit 11.4
# *.dds;  Direct Diversion Station file for StateMod Example 11
#
#>*********************************************
#>  Direct Diversion Station File
#>
#>  Card 1 format (a12, a24, a12, i8, f8.2, 2i8, 1x, a12)
#>
#>  ID          cdivid:  Diversion station ID
#>  Name        divnam:  Diversion name
#>  Riv ID       cgoto:  River node for diversion
#>  On/Off      idivsw:  Switch 0=off, 1=on
#>  Capacity    divcap:  Diversion capacity (CFS)
#>                dumx:  Not currently used
#>  RepType    ireptyp:  Replacement reservoir option (see StateMod doc)
#>  Daily ID   cdividy:  Daily diversion ID
#>
#>  Card 2 format (12x, a24, 12x, 2i8, f8.2, f8.0, 2i8)
#>
#>  User Name  usernam:  User name.
#>  DemType     idvcom:  Demand data type switch (see StateMod doc)
#>  #-Ret         nrtn:  Number of return flow table ref
#>  Eff         divefc:  Annual system efficiency
#>  Area          area:  Irrigated acreage
#>  UseType     irturn:  Use type (see StateMod doc)
#>  Demsrc      demsrc:  Demand source (see StateMod doc)
#>
#>  Card 3 format (free format)
#>
#>     diveff (12):  System efficiency % by month
#>
#>  Card 4 format (36x, a12, f8.2, i8)
#>
#>  Ret ID      crtnid:  River node receiving return flow
#>  Ret %       pcttot:  Percent of return flow to this river node
#>  Table #     irtndl:  Delay (return flow) table for this return flow.
#>
#> ID               Name             Riv ID     On/Off  Capacity        RepType   Daily ID
#>---------eb----------------------eb----------eb------eb------eb------eb------exb----------e
#>            User Name                       DemType   #-Ret   Eff %   Area  UseType DemSrc
#>xxxxxxxxxxb----------------------exxxxxxxxxxxxb------eb------eb------eb------eb------eb------e
#>         ... Monthly Efficiencies...
#>b-----------------------------------------------------------------------e
#>                                   Ret ID       Ret % Table #
#>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxb----------eb------eb------e
Dem_3       Irrigation Demand _3    Dem_3              1 5000.00       1       0  Dem_3
                                                       1       1     50.    0.00       1       0
                                    Dem_4        100.00       1
Dem_4       Irrigation Demand _4    Dem_4              1 5000.00       1       0  Dem_4
                                                       1       1     50.    0.00       1       0
                                    T&CPln_1     100.00       1
Dem_5       Irrigation Demand _5    Dem_5              1 5000.00       1       0  Dem_5
                                                       1       1     50.    0.00       1       0
                                    Dem_2        100.00       1
Dem_2       Irrigation Demand _2    Dem_2              1 5000.00       1       0  Dem_2
                                                       1       1     50.    0.00       1       0
                                    Dem_1        100.00       1
Dem_1       Municipal Demand _1     Dem_1              1 5000.00       1       0  Dem_1
                                                       1       1     20.    0.00       1       0
                                    ISF          100.00       2

# Exhibit 11.5
# ex*.pln;  Plan file for StateMod Example 11
#
# *****************************************************
```

```
#     Card 1   Control
#     format:  (a12, a24, a12, 5i8)
#
#     Plan ID:              Pid     Include _ instead of blanks
#     Plan Name:            Pname   Include _ instead of blanks
#     Plan Location         iPsta   River node where the plan is located
#     Plan On/Off:          Pon     On (1) or Off (0) switch
#
#     Plan Type             iPlnTyp  1 = Terms and Conditions (T&C)
#                                    2 = Well Augmentation
#                                    3 = Reservoir Reuse
#                                    4 = Non Reservoir Reuse (e.g., WWTP)
#                                    5 = Reuse to a Reservoir from Tmtn
#                                    6 = Reuse to a Diversion from Tmtn
#                                    7 = Transmountain import
#                                    8 = Recharge Plan
#                                    9 = Out-of-Priority Diversion or Storage
#                                   10 = Special Well Augmentation (e.g., Designated Basin, Coffin Wells, etc.)
#                                   11 = Accounting Plan (e.g., changed water rights)
#                                   12 = Release Limit Plan (e.g., HUP Pool Release Limit)
#
#     Plan Efficiency (%)   Peff    Enter 0 if not used
#                                   Enter 1 to read 12 plan efficiency values (%)
#                                   Enter -1 if data is provided in an Operating Rule file (*.opr)
#                                   Enter 999 to use the source structure's efficiency
#     Plan Return Flow ID   iPrf    Enter 0 if not used
#                                   Enter 1 if data is provided in an Plan Return Flow file (*.prf)
#                                   Enter 999 to use the source structure's return flow pattern
#     Plan Failure Switch   iPfail  Used only for a T&C Plan (iPlntype = 1)
#                                   Enter 0 to not turn plan off if it fails
#                                   Enter 1 to turn a plan off if it fails
#                                   1 = Do stop and accumulate failures to be paid in subsequent time steps
#     Plan Initial Storage  Psto1   Storage in Plan structure at beginning of simulation
#                                   0 for non-Reuse Reservoir plans (iPtype<>3)
#                                   >= 0 for Reuse Reservoir plans (iPtype=3) - set equal to storage in associated
reservoir (*.res) account
#     Plan Source           Psource Source ID of the structure where plan water becomes available
#                                   Note this information is currently used only when the plan type is
#                                   recharge (type 8) from a reservoir
#     Plan Account          iPAcc   Source Account of the structure where plan water becomes available
#                                   Note this information is currently used only when the plan type is
#                                   recharge (type 8) from a reservoir
#
#
# ID        Name                    RiverLoc      ON/Off  iPtype    Peff    iPrf  iPfail   Psto1 Psource     IPAcc
#----------eb----------------------eb----------eb------eb------eb------eb------eb------exb----------eb------e
Pln_1       AccountingPlan          Pln_1              1      11       0       0       0       0 Dem_2         0
T&CPln_1    T&C_Plan                T&CPln_1           1       1      -1       1       0       0 Pln_1         0

# Exhibit 11.6
# *.prf;  Plan Return file for StateMod Example 11
#
#**************************************************
#
# Plan Return Flow File (*.prf)
#
#     Card 1   Control
#     Free Format
#
#     cistat              Plan ID
#     crtnid              River node receiving return flow
#     pcttotPP(1)         Percent of return flow to this river node
#     irtndlPP(1)         Delay (return flow) table for this return flow
#
# Plan ID   NA                      Ret ID         Ret % Table #
#----------eb----------------------eb----------eb------eb------e
T&CPln_1                            T&CPln_1       100.00       1

# Exhibit 11.7
# *.opr; operating rules file for Statemod Example 11
#      This file lists the operating rules used in model simulation
#
#
#                     GUIDE TO COLUMN ENTRIES
#     =======================================
#          ID            ID number of operating rule that is used to separate operating rule output in *.xop file
#          Name       Name of operating rule - used for descriptive purposes only
#          Admin#     Administration number used to determine priority of operational water rights relative to other
operations and direct diversion, reservoir, instream flow, and well rights (see tabulation in *.xwr file)
#          # Str      Number of carrier structures, monthly on/off switches, or monthly volumetrics (flag telling
StateMod program the number of entries on next line)
#          On/Off     1 for ON and 0 for OFF
#          Dest ID    Destination of operating rule whose demand is to be met by simulating the operating rule
#          Dest Ac    Account at destination to be met by operating rule - typically 1 for a diversion structure and
account number for reservoir destination
#          Sou1 ID    ID number of primary source of water under which water right is being diverted in operating rule
- typically a water right, reservoir, or Plan structure
#          Sou1 Ac    Account of Sou1 - typically 1 for a diversion structure and account number for reservoir source
#          Sou2 ID    ID of Plan where reusable storage water or reusable ditch credits is accounted
```

```
#          Sou2 Ac    Percentage of Plan supplies available for operation
#          Type       Rule type corresponding with definitions in Chapter 4 of StateMod documentation
#          ReusePlan  ID of Plan where reusable return flows or diversions to storage are accounted
#          Div Type   'Diversion' indicates pro-rata diversion of source water right priority or exchange of reusable
credits to Dest1
#                      'Depletion' indicates pro-rata diversion of source water right priority consumptive use or
augmentation of upstream diversions at Dest1
#          OprLoss    Percentage of simulated diversion lost in carrier ditch (only applies to certain rules - see
StateMod documentation, Section 4.13)
#          Limit      Capacity limit for carrier structures different from capacity in .dds file (used to represent
constricted conveyance capacity for winter deliveries to reservoirs)
#          Comments   Description of rule type
#
# ID        Name                    NA                    Admin#   # Str  On/Off Dest Id     Dest Ac  Sou1 Id     Sou1
Ac  Sou2 Id     Sou2 Ac     Type ReusePlan    Div Type      OprLoss   Limit Comments
# ---------eb----------------------eb----------exxxxb----------eb------eb------e-b----------eb------e-b----------eb---
---e-b----------eb------eb------exb----------exb----------exb------eb------exb----------
Opr_1       Opr_Pro_Rata_Exchange_to_AcctPlan           6.00001      0.       1 Pln_1             1 Dem_2_WR_1
10 NA               0      24 NA           Diversion           0       0       0    9999 Direct Flow Exchange of
Pro-Rata Water Right

     5000.      0.      0.      0.      0.      0.   5000.   5000.   5000.   5000.   5000.   5000.  35000.0
Opr_2       Opr_AcctPlan_Release                         6.00002      0.       1 Dem_4             1 Pln_1
100 T&CPln_1          1      28 NA           Diversion           0       0       0    9999 Accounting Plan to Demand
by Exchange
       40.      0.      0.      0.      0.      0.     40.     40.     40.     40.     40.     40.
Opr_3       Opr_Reservoir_Release_to_T&C               50.00000      0.       1 T&CPln_1          0 Res_1
1 NA               0      48 NA           NA                  0       0       0    9999 Reservoir Release to T&C
Plan Demand
Opr_4       Opr_AcctPln-Spill                       99999.00000      0.       1 NA                0 Pln_1
0 NA               0      29 NA           NA                  0       1       0    9999 AcctPlan Spill
                                    Opr_1

# Exhibit 11.8
# *.out; Output request file for StateMod Example 11
#
# Type (e.g. Diversion, StreamGage, Reservoir, InstreamFlow, Well or All)
#
All
#
# Parameter (e.g. Total_Supply, Sim_EOM, River_Outflow or All)
#
All
#
# ID Name Type and Print Code (0=no, 1=yes);
# Note: id = All prints all
#       id = -999 = stop
#       default is to turn on all stream gages (FLO)
#
All
Dem_3       Exist. Diver. 3/Inflow     DIV     1
Res_1       Exist. Reservoir           RES     1
Dem_4       Exist. Diver. 4            DIV     1
Dem_5       Exist. Diver. 5/Inflow     DIV     1
Pln_1       Plan Structure             OTH     1
Dem_2       Exist. Diver. 2            DIV     1
T&CPln_1    T&C Plan                   OTH     1
Dem_1       Exist. Diver. 1            DIV     1
ISF         Top Instream Flow          ISF     1
ISF.01      Bottom Instream Flow       ISF     1
-999
#
# ________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex11.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 13: 5:24
# Time Step:         Monthly
#
# ________________________________________________________________________________

                               Water Budget  ACFT

             Stream                    From/To      From       From       Total                From River
Well    Reservoir  Reservoir    Stream  Reservoir            To       SoilM
Year   Mo      Inflow      Return      GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change        SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
1979 OCT       4000.0      1306.7          0.0          0.0       368.9      5675.6      5035.6         0.0          0.0
0.0         0.0       750.7      -110.7         0.0         0.0      5675.6         0.0      1733.3         0.0
0.0         0.0
```

1979	NOV	4000.0	2675.6	0.0	0.0	0.0	6675.6	5555.6	0.0	0.0	0.0	0.0	1230.7	-110.7	0.0	0.0	6675.6	0.0	2177.8	0.0	0.0	0.0
1979	DEC	4000.0	3291.9	0.0	0.0	0.0	7291.9	5851.9	0.0	0.0	0.0	0.0	1440.0	0.0	0.0	0.0	7291.9	0.0	2325.9	0.0	0.0	0.0
1980	JAN	4000.0	3550.6	0.0	0.0	0.0	7550.6	5950.6	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7550.6	0.0	2375.3	0.0	0.0	0.0
1980	FEB	4000.0	3583.5	0.0	0.0	0.0	7583.5	5983.5	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7583.5	0.0	2391.8	0.0	0.0	0.0
1980	MAR	4000.0	3594.5	0.0	0.0	0.0	7594.5	5994.5	0.0	0.0	25.2	0.0	1600.0	-25.2	0.0	0.0	7594.5	0.0	2422.4	0.0	0.0	0.0
1980	APR	4000.0	3598.2	0.0	0.0	357.0	7955.2	6355.2	0.0	0.0	326.9	0.0	1707.1	-434.0	0.0	0.0	7955.2	0.0	2725.9	0.0	0.0	0.0
1980	MAY	20000.0	3724.5	0.0	0.0	368.9	24093.5	6868.9	0.0	0.0	297.5	0.0	5442.3	11484.7	0.0	0.0	24093.5	0.0	2947.5	0.0	0.0	0.0
1980	JUN	20000.0	3850.0	0.0	0.0	357.0	24207.0	6857.0	0.0	0.0	799.9	0.0	5567.8	10982.3	0.0	0.0	24207.0	0.0	3449.9	0.0	0.0	0.0
1980	JUL	4000.0	3725.0	0.0	0.0	368.9	8093.9	6368.9	0.0	0.0	483.9	0.0	1942.8	-701.7	0.0	0.0	8093.9	0.0	2883.9	0.0	0.0	0.0
1980	AUG	4000.0	3600.0	0.0	0.0	368.9	7968.9	6368.9	0.0	0.0	384.8	0.0	1821.4	-606.1	0.0	0.0	7968.9	0.0	2784.8	0.0	0.0	0.0
1980	SEP	4000.0	3481.0	0.0	0.0	357.0	7838.0	5881.0	0.0	0.0	319.1	0.0	2067.7	-429.8	0.0	0.0	7838.0	0.0	2481.1	0.0	0.0	0.0
1980	Tot	80000.0	39981.4	0.0	0.0	2546.8	122528.3	73071.7	0.0	0.0	2637.2	0.0	26770.4	20048.9	0.0	0.0	122528.3	0.0	30699.7	0.0	0.0	0.0

Water Budget ACFT

Year	Mo	Stream Inflow	Stream Return	From/To GWStorage	From SoilM	From Plan (5)	Total Inflow	Stream Divert (6)	From River by Well	Well Depletion	Reservoir Evaporation	Reservoir Seepage	Stream Outflow	Reservoir GWStorage Change	To SoilM	SoilM Change	Total Outflow	Delta	CU (1)	Loss	(2) Pumping	(3) Salvage (4)
		(+)	(+)	(+)	(+)	(+)	NA	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	NA	NA	NA	NA	NA	NA
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Ave	OCT	4000.0	1306.7	0.0	0.0	368.9	5675.6	5035.6	0.0	0.0	0.0	0.0	750.7	-110.7	0.0	0.0	5675.6	0.0	1733.3	0.0	0.0	0.0
Ave	NOV	4000.0	2675.6	0.0	0.0	0.0	6675.6	5555.6	0.0	0.0	0.0	0.0	1230.7	-110.7	0.0	0.0	6675.6	0.0	2177.8	0.0	0.0	0.0
Ave	DEC	4000.0	3291.9	0.0	0.0	0.0	7291.9	5851.9	0.0	0.0	0.0	0.0	1440.0	0.0	0.0	0.0	7291.9	0.0	2325.9	0.0	0.0	0.0
Ave	JAN	4000.0	3550.6	0.0	0.0	0.0	7550.6	5950.6	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7550.6	0.0	2375.3	0.0	0.0	0.0
Ave	FEB	4000.0	3583.5	0.0	0.0	0.0	7583.5	5983.5	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7583.5	0.0	2391.8	0.0	0.0	0.0
Ave	MAR	4000.0	3594.5	0.0	0.0	0.0	7594.5	5994.5	0.0	0.0	25.2	0.0	1600.0	-25.2	0.0	0.0	7594.5	0.0	2422.4	0.0	0.0	0.0
Ave	APR	4000.0	3598.2	0.0	0.0	357.0	7955.2	6355.2	0.0	0.0	326.9	0.0	1707.1	-434.0	0.0	0.0	7955.2	0.0	2725.9	0.0	0.0	0.0
Ave	MAY	20000.0	3724.5	0.0	0.0	368.9	24093.5	6868.9	0.0	0.0	297.5	0.0	5442.3	11484.7	0.0	0.0	24093.5	0.0	2947.5	0.0	0.0	0.0
Ave	JUN	20000.0	3850.0	0.0	0.0	357.0	24207.0	6857.0	0.0	0.0	799.9	0.0	5567.8	10982.3	0.0	0.0	24207.0	0.0	3449.9	0.0	0.0	0.0
Ave	JUL	4000.0	3725.0	0.0	0.0	368.9	8093.9	6368.9	0.0	0.0	483.9	0.0	1942.8	-701.7	0.0	0.0	8093.9	0.0	2883.9	0.0	0.0	0.0
Ave	AUG	4000.0	3600.0	0.0	0.0	368.9	7968.9	6368.9	0.0	0.0	384.8	0.0	1821.4	-606.1	0.0	0.0	7968.9	0.0	2784.8	0.0	0.0	0.0

```
Ave   SEP      4000.0      3481.0         0.0         0.0       357.0      7838.0      5881.0         0.0         0.0
319.1        0.0      2067.7      -429.8         0.0         0.0      7838.0         0.0      2481.1         0.0
0.0        0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
Ave   Tot     80000.0     39981.4         0.0         0.0      2546.8    122528.3     73071.7         0.0         0.0
2637.2        0.0     26770.4     20048.9         0.0         0.0    122528.3         0.0     30699.7         0.0
0.0        0.0
  Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency
           + max (Resevoir Evaporation (Evap), 0.0).
        (2) Loss is not part of the Stream Water Balance.
            It is the portion of a diversion, well pumping
            and reservoir seepage that does not return to
            the stream
        (3) Pumping is not part of the Stream Balance.
            Its impact on the stream is included in the From River by Well and Well Depletion columns
        (4) Salvage is not part of the Stream Water Balance.
            It is the portion of well pumping that does not impact the stream
        (5) From Plan is water from a reuse plan.
        (6) Divert does not include diversions by an
            instream flow or a T&C plan. Also to avoid
            double accounting with reservoir storage it has
            reduced by:
              1       0. af/yr for Diverted to Storage.
              2       0. af/yr for a Diversion Carrier.
              3       0. af/yr for a Reservior Carrier.
              4       0. af/yr for a Plan Carrier.
                      0. af/yr Total

#
# ___________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex11.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 13: 5:26
# Time Step:         Monthly
#
# ___________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =        11
#
#
________________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
            operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID               Type         Admin #  On/Off  Str ID #1    Str ID #2          Amount Right Name
Str Name #1               Str Name #2
#    (1) (2)               (3)             (4)     (5)  (6)          (7)                   (8) (9)
(10)                       (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

      1 Dem_1_WR_1          3         2.00000       1  Dem_1        -1              100.000 c M&I Demand _1
Municipal Demand _1
      2 Dem_2_WR_1          3         6.00000       0  Dem_2        -1               60.000 c Irrigation Demand _2
Irrigation Demand _2
```

```
       3 Opr_1             124         6.00001       1  -1           -1                -1.000 x
Opr_Pro_Rata_Exchange_to
       4 Opr_2             128         6.00002       1  -1           -1                -1.000 x Opr_AcctPlan_Release

       5 Dem_3_WR_1          3         7.00000       1  Dem_3        -1               100.000 c Irrigation Demand _3
Irrigation Demand _3
       6 ISF_WR_1            1         9.00000       1  ISF          -1                65.500 c Instream Flow 1
Instream Demand
       7 Dem_4_WR_1          3        10.00000       1  Dem_4        -1               100.000 c Irrigation Demand _4
Irrigation Demand _4
       8 Res_1_WR_1          2        15.00000       1  Res_1        -1            100000.000 a Reservoir_1
Reservoir_1
       9 Dem_5_WR_1          3        15.00000       1  Dem_5        -1               100.000 c Irrigation Demand _5
Irrigation Demand _5

      10 Opr_3             148        50.00000       1  -1           -1                -1.000 x
Opr_Reservoir_Release_to
      11 Opr_4             129     99999.00000       1  -1           -1                -1.000 x Opr_AcctPln-Spill
#
#
# ________________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex11.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 11:24:57
# Time Step:         Monthly
#
# ________________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex11.*
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                               _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand               From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    ====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3       1979  OCT  1000.0   500.0   666.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   666.7   333.3   166.7   333.3     0.0   333.3     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
666.7     0.0   333.3   110.7 Dem_1            100.000
Dem_3       Dem_3       1979  NOV  1000.0   500.0   888.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   888.9   111.1    55.6   444.4     0.0   444.4     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
888.9     0.0   111.1   110.7 Dem_1            100.000
Dem_3       Dem_3       1979  DEC  1000.0   500.0   963.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   963.0    37.0    18.5   481.5     0.0   481.5     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
963.0     0.0    37.0     0.0 Dem_1            100.000
Dem_3       Dem_3       1980  JAN  1000.0   500.0   987.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   987.7    12.3     6.2   493.8     0.0   493.8     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
987.7     0.0    12.3     0.0 Dem_1            100.000
Dem_3       Dem_3       1980  FEB  1000.0   500.0   995.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   995.9     4.1     2.1   497.9     0.0   497.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
995.9     0.0     4.1     0.0 Dem_1            100.000
Dem_3       Dem_3       1980  MAR  1000.0   500.0   998.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   998.6     1.4     0.7   499.3     0.0   499.3     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
998.6     0.0     1.4     0.0 Dem_1            100.000
Dem_3       Dem_3       1980  APR  1000.0   500.0   999.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   999.5     0.5     0.2   499.8     0.0   499.8     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
999.5     0.0     0.5     0.5 Dem_1            100.000
Dem_3       Dem_3       1980  MAY  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1414.8 NA               -1.000
```

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Dem_3       Dem_3       1980  JUN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1670.2 NA                 -1.000
Dem_3       Dem_3       1980  JUL  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit        -1.000
Dem_3       Dem_3       1980  AUG  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit        -1.000
Dem_3       Dem_3       1980  SEP  1000.0   500.0   881.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   881.0   119.0    59.5   440.5     0.0   440.5     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
881.0     0.0   119.0   119.0 Dem_1             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ __________
Dem_3       Dem_3       1980  TOT 12000.0  6000.0 11381.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 11381.2   618.8   309.4  5690.6     0.0  5690.6     0.0     0.0 20000.0     0.0     0.0     0.0 20000.0
11381.2     0.0  8618.8  3425.9 NA                 -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex11.*
PAGE NO.   2

    STRUCTURE ID (0 = total)  : Dem_4              2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4        Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4        Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand               From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                 ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_4       Dem_4       1979  OCT   500.0   250.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0   368.9   131.1    65.5   184.5     0.0   184.5     0.0   333.3     0.0   166.7     0.0     0.0   500.0
368.9     0.0   131.1   110.7 Dem_1             100.000
Dem_4       Dem_4       1979  NOV   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   111.1     0.0   388.9     0.0     0.0   500.0
0.0     0.0   500.0   110.7 Dem_1           100.000
Dem_4       Dem_4       1979  DEC   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    37.0     0.0   463.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  JAN   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    12.3     0.0   487.7     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  FEB   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     4.1     0.0   495.9     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  MAR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     1.4     0.0   498.6     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  APR   500.0   250.0     0.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   357.0   143.0    71.5   178.5     0.0   178.5     0.0     0.5     0.0   499.5     0.0     0.0   500.0
357.0     0.0   143.0   107.1 Dem_1             100.000
Dem_4       Dem_4       1980  MAY   500.0   250.0   131.1     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   499.9     0.0     0.0  4499.9
500.0     0.0  3999.9  1414.8 NA                -1.000
Dem_4       Dem_4       1980  JUN   500.0   250.0   143.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  1670.2 NA                -1.000
Dem_4       Dem_4       1980  JUL   500.0   250.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0   368.9   131.1    65.5   184.5     0.0   184.5     0.0     0.0     0.0   500.0     0.0     0.0   500.0
368.9     0.0   131.1   131.1 ISF             100.000
Dem_4       Dem_4       1980  AUG   500.0   250.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0   368.9   131.1    65.5   184.5     0.0   184.5     0.0     0.0     0.0   500.0     0.0     0.0   500.0
368.9     0.0   131.1   131.1 ISF             100.000
Dem_4       Dem_4       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   119.0     0.0   470.2     0.0     0.0   589.3
0.0     0.0   589.3   467.7 Dem_1           100.000
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___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ __________
Dem_4       Dem_4       1980  TOT  5500.0  2750.0   274.0     0.0  2189.8     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2463.8  3036.2  1518.1  1231.9     0.0  1231.9     0.0  8618.8     0.0  5470.4     0.0     0.0 14089.1
2463.8     0.0 11625.3  4143.4 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex11.*
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    STRUCTURE ID (0 = total)  : Dem_5              -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand               From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                         Station Balance
==================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   110.7 Dem_1           100.000
Dem_5       Dem_5       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   110.7 Dem_1           100.000
Dem_5       Dem_5       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
Dem_5       Dem_5       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   107.1 Dem_1           100.000
Dem_5       Dem_5       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Res_1        100000.000
Dem_5       Dem_5       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 Res_1        100000.000
Dem_5       Dem_5       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   217.8 ISF             100.000
Dem_5       Dem_5       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   221.4 ISF             100.000
Dem_5       Dem_5       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   357.0 Dem_2            60.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ __________
Dem_5       Dem_5       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0  1124.6 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex11.*
PAGE NO.   4
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    STRUCTURE ID (0 = total)  : Pln_1           10001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : 6576576576576576576576576576576576576576576576576576576576576576576576576576576576576576576576576576576576576576576576
    RIVER LOCATION - FROM     : Pln_1       Plan Structure
    RIVER LOCATION - TO       : Pln_1       Plan Structure


Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ===============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Pln_1       Pln_1       1979  OCT     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   110.7 NA               -1.000
Pln_1       Pln_1       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   110.7 NA               -1.000
Pln_1       Pln_1       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  APR     0.0     0.0     0.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
357.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   107.1 NA               -1.000
Pln_1       Pln_1       1980  MAY     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  JUN     0.0     0.0     0.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
357.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  JUL     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   217.8 NA               -1.000
Pln_1       Pln_1       1980  AUG     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   221.4 NA               -1.000
Pln_1       Pln_1       1980  SEP     0.0     0.0     0.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
357.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0   357.0 NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Pln_1       Pln_1       1980  TOT     0.0     0.0     0.0     0.0  2546.8     0.0     0.0     0.0     0.0     0.0
2546.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0  1124.6 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex11.*
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    STRUCTURE ID (0 = total)  : Dem_2               4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2       Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2       Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                ______ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ===============================
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Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID          ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
=================================== ===========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2       1979  OCT  3000.0  1500.0  1631.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1631.1  1368.9   684.5   815.5     0.0   815.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
1631.1     0.0  1368.9   110.7 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1979  NOV  3000.0  1500.0  2666.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2666.7   333.3   166.7  1333.3     0.0  1333.3     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2666.7     0.0   333.3   110.7 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1979  DEC  3000.0  1500.0  2888.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2888.9   111.1    55.6  1444.4     0.0  1444.4     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2888.9     0.0   111.1     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  JAN  3000.0  1500.0  2963.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2963.0    37.0    18.5  1481.5     0.0  1481.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2963.0     0.0    37.0     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  FEB  3000.0  1500.0  2987.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2987.7    12.3     6.2  1493.8     0.0  1493.8     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2987.7     0.0    12.3     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  MAR  3000.0  1500.0  2995.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2995.9     4.1     2.1  1497.9     0.0  1497.9     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2995.9     0.0     4.1     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  APR  3000.0  1500.0  2641.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2641.6   358.4   179.2  1320.8     0.0  1320.8     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2641.6     0.0   358.4   107.1 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  MAY  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0     0.0 NA                -1.000
Dem_2       Dem_2       1980  JUN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0     0.0 NA                -1.000
Dem_2       Dem_2       1980  JUL  3000.0  1500.0  2631.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2631.1   368.9   184.5  1315.5     0.0  1315.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2631.1     0.0   368.9   217.8 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  AUG  3000.0  1500.0  2631.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2631.1   368.9   184.5  1315.5     0.0  1315.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2631.1     0.0   368.9   221.4 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  SEP  3000.0  1500.0  2643.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2643.0   357.0   178.5  1321.5     0.0  1321.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2643.0     0.0   357.0   357.0 Hgate_Limit       -1.000
___________ __________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_2       Dem_2       1980  TOT 36000.0 18000.0 32679.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 32679.8  3320.2  1660.1 16339.9     0.0 16339.9     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
32679.8     0.0 27320.2  1124.6 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex11.*
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    STRUCTURE ID (0 = total)  : Res_1            7501
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Reservoir_1
    RIVER LOCATION - FROM     : Res_1        Exist. Reservoir
    RIVER LOCATION - TO       : Res_1        Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.



Shortage                 Water Use
                                        Demand              From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID          ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
=================================== ===========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Res_1       Res_1       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1368.9     0.0     0.0     0.0     0.0  1368.9  -
110.7     0.0  1479.6   110.7 Dem_1           100.000
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Res_1       Res_1        1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   333.3     0.0     0.0     0.0     0.0   333.3  -
110.7     0.0   444.0   110.7 Dem_1           100.000
Res_1       Res_1        1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   111.1     0.0     0.0     0.0     0.0   111.1
0.0     0.0   111.1     0.0 Dem_1           100.000
Res_1       Res_1        1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    37.0     0.0     0.0     0.0     0.0    37.0
0.0     0.0    37.0     0.0 Dem_1           100.000
Res_1       Res_1        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    12.3     0.0     0.0     0.0     0.0    12.3
0.0     0.0    12.3     0.0 Dem_1           100.000
Res_1       Res_1        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     4.1     0.0     0.0     0.0     0.0     4.1
0.0     0.0     4.1     0.0 ISF             100.000
Res_1       Res_1        1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   358.4     0.0     0.0     0.0     0.0   358.4  -
107.1     0.0   465.5   107.1 Dem_1           100.000
Res_1       Res_1        1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0     0.0     0.0 12000.0
11782.2     0.0   217.8     0.0 Hgate_Limit      -1.000
Res_1       Res_1        1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0     0.0     0.0 12000.0
11782.2     0.0   217.8     0.0 Hgate_Limit      -1.000
Res_1       Res_1        1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9  -
217.8     0.0   586.7   217.8 ISF             100.000
Res_1       Res_1        1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9  -
221.4     0.0   590.3   221.4 ISF             100.000
Res_1       Res_1        1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   357.0     0.0     0.0     0.0     0.0   357.0  -
110.7     0.0   467.7   357.0 NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Res_1       Res_1        1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 27320.2     0.0     0.0     0.0     0.0 27320.2
22686.1     0.0  4634.0  1124.6 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex11.*
PAGE NO.   7

    STRUCTURE ID (0 = total)  : T&CPln_1        10002
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : 659659659659659659659659659659659659659659659659659659659659659659659659659
    RIVER LOCATION - FROM     : T&CPln_1     T&C Plan
    RIVER LOCATION - TO       : T&CPln_1     T&C Plan



Shortage                 Water Use
                                        Demand               From River By                    From Carrier By
Carried                 ============== ===============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total    Total    CU             To    Total            Upstrm
ID         ID            Year    Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
===================================== =========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
T&CPln_1    T&CPln_1     1979  OCT   110.7     0.0     0.0   110.7     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   110.7     0.0     0.0     0.0     0.0   110.7     0.0  1610.7     0.0    92.2     0.0     0.0  1702.9
0.0     0.0  1702.9   110.7 NA                -1.000
T&CPln_1    T&CPln_1     1979  NOV   110.7     0.0     0.0   110.7     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   110.7     0.0     0.0     0.0     0.0   110.7     0.0   944.0     0.0    92.2     0.0     0.0  1036.2
0.0     0.0  1036.2   110.7 NA                -1.000
T&CPln_1    T&CPln_1     1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   611.1     0.0     0.0     0.0     0.0   611.1
0.0     0.0   611.1     0.0 NA                -1.000
T&CPln_1    T&CPln_1     1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   537.0     0.0     0.0     0.0     0.0   537.0
0.0     0.0   537.0     0.0 NA                -1.000
T&CPln_1    T&CPln_1     1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   512.3     0.0     0.0     0.0     0.0   512.3
0.0     0.0   512.3     0.0 NA                -1.000
T&CPln_1    T&CPln_1     1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   504.1     0.0     0.0     0.0     0.0   504.1
0.0     0.0   504.1     0.0 NA                -1.000
T&CPln_1    T&CPln_1     1980  APR   107.1     0.0     0.0   107.1     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   107.1     0.0     0.0     0.0     0.0   107.1     0.0   608.5     0.0    89.3     0.0     0.0   697.7
0.0     0.0   697.7   107.1 NA                -1.000
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T&CPln_1    T&CPln_1     1980  MAY   217.8     0.0     0.0   217.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   217.8     0.0     0.0     0.0     0.0   217.8     0.0  4217.7     0.0   214.3     0.0     0.0  4431.9
0.0     0.0  4431.9  1414.8 NA               -1.000
T&CPln_1    T&CPln_1     1980  JUN   217.8     0.0     0.0   217.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   217.8     0.0     0.0     0.0     0.0   217.8     0.0  4217.8     0.0   250.0     0.0     0.0  4467.8
0.0     0.0  4467.8  1670.2 NA               -1.000
T&CPln_1    T&CPln_1     1980  JUL   217.8     0.0     0.0   217.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   217.8     0.0     0.0     0.0     0.0   217.8     0.0   717.8     0.0   217.2     0.0     0.0   935.0
0.0     0.0   935.0   217.8 NA               -1.000
T&CPln_1    T&CPln_1     1980  AUG   221.4     0.0     0.0   221.4     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   221.4     0.0     0.0     0.0     0.0   221.4     0.0   721.4     0.0   184.5     0.0     0.0   905.8
0.0     0.0   905.8   221.4 NA               -1.000
T&CPln_1    T&CPln_1     1980  SEP   110.7     0.0     0.0   110.7     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   110.7     0.0     0.0     0.0     0.0   110.7     0.0  1057.0     0.0    92.2     0.0     0.0  1149.2
0.0     0.0  1149.2   467.7 NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
T&CPln_1    T&CPln_1     1980  TOT  1313.9     0.0     0.0  1313.9     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1313.9     0.0     0.0     0.0     0.0  1313.9     0.0 16259.4     0.0  1231.9     0.0     0.0 17491.3
0.0     0.0 17491.3  4320.4 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex11.*
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    STRUCTURE ID (0 = total)  : Dem_1              5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU            To    Total          Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
====================================== ==========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1702.9     0.0   407.8     0.0     0.0  2110.7
2000.0     0.0   110.7   110.7 NA                  -1.000
Dem_1       Dem_1        1979  NOV  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1036.2     0.0  1074.4     0.0     0.0  2110.7
2000.0     0.0   110.7   110.7 NA                  -1.000
Dem_1       Dem_1        1979  DEC  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   611.1     0.0  1388.9     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                  -1.000
Dem_1       Dem_1        1980  JAN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   537.0     0.0  1463.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                  -1.000
Dem_1       Dem_1        1980  FEB  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   512.3     0.0  1487.7     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                  -1.000
Dem_1       Dem_1        1980  MAR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   504.1     0.0  1495.9     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA                  -1.000
Dem_1       Dem_1        1980  APR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   697.7     0.0  1409.4     0.0     0.0  2107.1
2000.0     0.0   107.1   107.1 NA                  -1.000
Dem_1       Dem_1        1980  MAY  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4431.9     0.0  1410.4     0.0     0.0  5842.3
2000.0     0.0  3842.3  1414.8 NA                  -1.000
Dem_1       Dem_1        1980  JUN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4467.8     0.0  1500.0     0.0     0.0  5967.8
2000.0     0.0  3967.8  1670.2 NA                  -1.000
Dem_1       Dem_1        1980  JUL  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   935.0     0.0  1407.8     0.0     0.0  2342.8
2000.0     0.0   342.8   217.8 NA                  -1.000
Dem_1       Dem_1        1980  AUG  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   905.8     0.0  1315.5     0.0     0.0  2221.4
2000.0     0.0   221.4   221.4 NA                  -1.000
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Dem_1       Dem_1       1980  SEP  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1149.2     0.0  1318.5     0.0     0.0  2467.7
2000.0     0.0   467.7   467.7 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_1       Dem_1       1980  TOT 24000.0  4800.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 24000.0     0.0     0.0  4800.0     0.0 19200.0     0.0 17491.3     0.0 15679.2     0.0     0.0 33170.4
24000.0     0.0  9170.4  4320.4 NA              -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex11.*
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    STRUCTURE ID (0 = total)  : ISF             5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF         Top Instream Flow
    RIVER LOCATION - TO       : ISF.01      Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
===================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF         1979  OCT  4027.5     0.0   640.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   640.0  3387.5     0.0     0.0     0.0   640.0     0.0   110.7     0.0   640.0     0.0     0.0   750.7
640.0     0.0   750.7   110.7 Hgate_Limit      -1.000
ISF         ISF         1979  NOV  3897.6     0.0  1120.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1120.0  2777.6     0.0     0.0     0.0  1120.0     0.0   110.7     0.0  1120.0     0.0     0.0  1230.7
1120.0     0.0  1230.7   110.7 Hgate_Limit      -1.000
ISF         ISF         1979  DEC  4027.5     0.0  1440.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1440.0  2587.5     0.0     0.0     0.0  1440.0     0.0     0.0     0.0  1440.0     0.0     0.0  1440.0
1440.0     0.0  1440.0     0.0 Hgate_Limit      -1.000
ISF         ISF         1980  JAN  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit      -1.000
ISF         ISF         1980  FEB  3637.7     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2037.7     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit      -1.000
ISF         ISF         1980  MAR  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit      -1.000
ISF         ISF         1980  APR  3897.6     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2297.6     0.0     0.0     0.0  1600.0     0.0   107.1     0.0  1600.0     0.0     0.0  1707.1
1600.0     0.0  1707.1   107.1 Hgate_Limit      -1.000
ISF         ISF         1980  MAY  4027.5     0.0  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  3842.3     0.0  1600.0     0.0     0.0  5442.3
4027.5     0.0  5442.3  1414.8 NA              -1.000
ISF         ISF         1980  JUN  3897.6     0.0  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0  3967.8     0.0  1600.0     0.0     0.0  5567.8
3897.6     0.0  5567.8  1670.2 NA              -1.000
ISF         ISF         1980  JUL  4027.5     0.0  1725.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1725.0  2302.5     0.0     0.0     0.0  1725.0     0.0   342.8     0.0  1600.0     0.0     0.0  1942.8
1725.0     0.0  1942.8   217.8 Hgate_Limit      -1.000
ISF         ISF         1980  AUG  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0   221.4     0.0  1600.0     0.0     0.0  1821.4
1600.0     0.0  1821.4   221.4 Hgate_Limit      -1.000
ISF         ISF         1980  SEP  3897.6     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2297.6     0.0     0.0     0.0  1600.0     0.0   467.7     0.0  1600.0     0.0     0.0  2067.7
1600.0     0.0  2067.7   467.7 Hgate_Limit      -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
ISF         ISF         1980  TOT 47420.5     0.0 22450.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 22450.1 24970.5     0.0     0.0     0.0 22450.1     0.0  9170.4     0.0 17600.0     0.0     0.0 26770.4
22450.1     0.0 26770.4  4320.4 NA              -1.000


   Diversion Summary  ACFT
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     STATEMOD
     StateMod Operating Rule Example - ex11.*
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    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Bottom Instream Flow
    RIVER LOCATION - FROM     : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


Shortage                 Water Use
                                         Demand               From River By                       From Carrier By
Carried                 ============== ===============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                 Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01       1979  OCT     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0   750.7    0.0    0.0    0.0    0.0   750.7
0.0     0.0   750.7   110.7 NA              -1.000
Baseflow    ISF.01       1979  NOV     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0  1230.7    0.0    0.0    0.0    0.0  1230.7
0.0     0.0  1230.7   110.7 NA              -1.000
Baseflow    ISF.01       1979  DEC     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0  1440.0    0.0    0.0    0.0    0.0  1440.0
0.0     0.0  1440.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  JAN     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0  1600.0    0.0    0.0    0.0    0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  FEB     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0  1600.0    0.0    0.0    0.0    0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  MAR     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0  1600.0    0.0    0.0    0.0    0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  APR     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0  1707.1    0.0    0.0    0.0    0.0  1707.1
0.0     0.0  1707.1   107.1 NA              -1.000
Baseflow    ISF.01       1980  MAY     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0  5442.3    0.0    0.0    0.0    0.0  5442.3
0.0     0.0  5442.3  1414.8 NA              -1.000
Baseflow    ISF.01       1980  JUN     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0  5567.8    0.0    0.0    0.0    0.0  5567.8
0.0     0.0  5567.8  1670.2 NA              -1.000
Baseflow    ISF.01       1980  JUL     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0  1942.8    0.0    0.0    0.0    0.0  1942.8
0.0     0.0  1942.8   217.8 NA              -1.000
Baseflow    ISF.01       1980  AUG     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0  1821.4    0.0    0.0    0.0    0.0  1821.4
0.0     0.0  1821.4   221.4 NA              -1.000
Baseflow    ISF.01       1980  SEP     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0  2067.7    0.0    0.0    0.0    0.0  2067.7
0.0     0.0  2067.7   467.7 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Baseflow    ISF.01       1980  TOT     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0
0.0     0.0    0.0    0.0    0.0    0.0    0.0    0.0    0.0 26770.4    0.0    0.0    0.0    0.0 26770.4
0.0     0.0 26770.4  4320.4 NA              -1.000


#
#
# _________________________________________________________________________________
# *.xre       Reservoir Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex12.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 12:12: 6
# Time Step:         Monthly
#
# _________________________________________________________________________________

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
PAGE NO.   1

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
```

```
    RESERVOIR ACCOUNT & AMOUNT:  0  100000.; where account 0 is the total
    RESERVOIR OWNER           : Total
    RIVER LOCATION            : Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.

                                                                                                              From
Storage to                                                    Station Balance
                                              From River By                From Carrier By
========================                             Targt_0    BOM  ======================
                             Initial ================================= ======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1           0 1979  OCT 50000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   110.7     0.0
0.0   110.7     0.0     0.0 49889.3100000.0 50000.0  1368.9   110.7     0.0     0.0  1479.6
Res_1           0 1979  NOV 49889.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   110.7     0.0
0.0   110.7     0.0     0.0 49778.6100000.0 50110.7   333.3   110.7     0.0     0.0   444.0
Res_1           0 1979  DEC 49778.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49778.6100000.0 50110.7   111.1     0.0     0.0     0.0   111.1
Res_1           0 1980  JAN 49778.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49778.6100000.0 50110.7    37.0     0.0     0.0     0.0    37.0
Res_1           0 1980  FEB 49778.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49778.6100000.0 50110.7    12.3     0.0     0.0     0.0    12.3
Res_1           0 1980  MAR 49778.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    25.2     0.0 49753.5100000.0 50110.7     4.1     0.0     0.0     0.0     4.1
Res_1           0 1980  APR 49753.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0
0.0   107.1   326.9     0.0 49319.5100000.0 50110.7   358.4   107.1     0.0     0.0   465.5
Res_1           0 1980  MAY 49319.5 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0   217.8     0.0
0.0   217.8   297.5     0.0 60804.2100000.0 50110.7 12000.0   217.8 12000.0     0.0   217.8
Res_1           0 1980  JUN 60804.2 12000.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0   217.8     0.0
0.0   217.8   799.9     0.0 71786.5100000.0 38110.7 12000.0   217.8 12000.0     0.0   217.8
Res_1           0 1980  JUL 71786.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   217.8     0.0
0.0   217.8   483.9     0.0 71084.8100000.0 26110.7   368.9   217.8     0.0     0.0   586.7
Res_1           0 1980  AUG 71084.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   221.4     0.0
0.0   221.4   384.8     0.0 70478.7100000.0 26110.7   368.9   221.4     0.0     0.0   590.3
Res_1           0 1980  SEP 70478.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   110.7     0.0
0.0   110.7   319.1     0.0 70048.9100000.0 26110.7   357.0   110.7     0.0     0.0   467.7
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           0 1980  TOT 50000.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0 24000.0  1313.9     0.0
0.0  1313.9  2637.2     0.0 70048.9    -1.0    -1.0 27320.2  1313.9 24000.0     0.0  4634.0

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
PAGE NO.   2

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  1   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_1
    RIVER LOCATION            : Exist. Reservoir

                                                                                                              From
Storage to                                                    Station Balance
                                              From River By                From Carrier By
========================                             Targt_0    BOM  ======================
                             Initial ================================= ======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1           1 1979  OCT 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   110.7     0.0
0.0   110.7     0.0     0.0 49864.3 50000.0 50000.0  1368.9   110.7     0.0     0.0  1479.6
Res_1           1 1979  NOV 49864.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   110.7     0.0
0.0   110.7     0.0     0.0 49753.6 50110.7 50110.7   333.3   110.7     0.0     0.0   444.0
Res_1           1 1979  DEC 49753.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49753.6 50221.4 50110.7   111.1     0.0     0.0     0.0   111.1
Res_1           1 1980  JAN 49753.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49753.6 50221.4 50110.7    37.0     0.0     0.0     0.0    37.0
Res_1           1 1980  FEB 49753.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49753.6 50221.4 50110.7    12.3     0.0     0.0     0.0    12.3
Res_1           1 1980  MAR 49753.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    25.2     0.0 49728.5 50221.4 50110.7     4.1     0.0     0.0     0.0     4.1
Res_1           1 1980  APR 49728.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0
0.0   107.1   326.7     0.0 49294.7 50246.5 50110.7   358.4   107.1     0.0     0.0   465.5
Res_1           1 1980  MAY 49294.7   167.0     0.0     0.0     0.0     0.0     0.0     0.0   167.0   217.8     0.0
0.0   217.8   239.8     0.0 49004.1 50680.5 50110.7 12000.0   217.8 12000.0     0.0   217.8
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Res_1           1 1980  JUN 49004.1   304.9     0.0     0.0     0.0     0.0     0.0     0.0   304.9   217.8     0.0
0.0   217.8   541.0     0.0 48550.2 39195.8 38110.7 12000.0   217.8 12000.0     0.0   217.8
Res_1           1 1980  JUL 48550.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   217.8     0.0
0.0   217.8   326.8     0.0 48005.7 28213.5 26110.7   368.9   217.8     0.0     0.0   586.7
Res_1           1 1980  AUG 48005.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   221.4     0.0
0.0   221.4   259.5     0.0 47524.8 28915.2 26110.7   368.9   221.4     0.0     0.0   590.3
Res_1           1 1980  SEP 47524.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   110.7     0.0
0.0   110.7   215.0     0.0 47199.1 29521.3 26110.7   357.0   110.7     0.0     0.0   467.7
____________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  TOT 49975.0   471.9     0.0     0.0     0.0     0.0     0.0     0.0   471.9  1313.9     0.0
0.0  1313.9  1933.9     0.0 47199.1    -1.0    -1.0 27320.2  1313.9 24000.0     0.0  4634.0

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
PAGE NO.   3

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  2   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_2
    RIVER LOCATION            : Exist. Reservoir

                                                                                                                From
Storage to                                                     Station Balance
                                                  From River By                 From Carrier By
========================                                 Targt_0    BOM  =======================
                             Initial ================================= =======================  Total  River    River
Carrier  Total         Seep & EOM    Stor_n  Decree   River  River   River
Reservoir     Acc Year   Mo  Storage  Priority Storage Exc_Pln   Loss   Priorty Sto_Exc  Loss  Bypass     SM  Supply
Short   Release Evap  Spill  Content Limit   Limit   Inflow Release Dvert

  River River
by Well Outflow
Res_1           2 1979  OCT    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50000.0 50000.0  1368.9   110.7     0.0     0.0  1479.6
Res_1           2 1979  NOV    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50110.7 50110.7   333.3   110.7     0.0     0.0   444.0
Res_1           2 1979  DEC    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50221.4 50110.7   111.1     0.0     0.0     0.0   111.1
Res_1           2 1980  JAN    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50221.4 50110.7    37.0     0.0     0.0     0.0    37.0
Res_1           2 1980  FEB    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50221.4 50110.7    12.3     0.0     0.0     0.0    12.3
Res_1           2 1980  MAR    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0    25.0 50221.4 50110.7     4.1     0.0     0.0     0.0     4.1
Res_1           2 1980  APR    25.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.2     0.0    24.8 50246.5 50110.7   358.4   107.1     0.0     0.0   465.5
Res_1           2 1980  MAY    24.8 11833.0     0.0     0.0     0.0     0.0     0.0     0.0 11833.0     0.0     0.0
0.0     0.0    57.7     0.0 11800.1 50680.5 50110.7 12000.0   217.8 12000.0     0.0   217.8
Res_1           2 1980  JUN 11800.1 11695.1     0.0     0.0     0.0     0.0     0.0     0.0 11695.1     0.0     0.0
0.0     0.0   258.9     0.0 23236.3 39195.8 38110.7 12000.0   217.8 12000.0     0.0   217.8
Res_1           2 1980  JUL 23236.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   157.1     0.0 23079.2 28213.5 26110.7   368.9   217.8     0.0     0.0   586.7
Res_1           2 1980  AUG 23079.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   125.3     0.0 22953.9 28915.2 26110.7   368.9   221.4     0.0     0.0   590.3
Res_1           2 1980  SEP 22953.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   104.1     0.0 22849.8 29521.3 26110.7   357.0   110.7     0.0     0.0   467.7
____________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           2 1980  TOT    25.0 23528.1     0.0     0.0     0.0     0.0     0.0     0.0 23528.1     0.0     0.0
0.0     0.0   703.3     0.0 22849.8    -1.0    -1.0 27320.2  1313.9 24000.0     0.0  4634.0
#
#
# _________________________________________________________________________________
# *.xpl       Plan
#
#   STATEMOD
#   StateMod Operating Rule Example - ex11.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 11:24:57
# Time Step:         Monthly
#
# _________________________________________________________________________________


Plan Summary    ACFT
Plan Number    =     1
Plan Type      =    11 Accounting_Plan
Plan ID        = Pln_1
Plan Name      = AccountingPlan
Plan Source    = Dem_2

Use   1   ID = Opr_2          Name = Opr_AcctPlan_Release       Opr Type =  28   Destination = Dem_4          Status =
On
Use   2   ID = Opr_4          Name = Opr_AcctPln-Spill          Opr Type =  29   Destination = NA             Status =
On
```

```
                                          Plan Uses
Plan        River         Year  Mo  Supply
========================================================================================================================
===============================
ID          ID                      Total   Use 1   Use 2   Use 3   Use 4   Use 5   Use 6   Use 7   Use 8   Use 9  Use
10  Use 11  Use 12  Use 13  Use 14  Use 15  Use 16  Use 17  Use 18  Use 19

   Plan Uses
===============
Use 20   Total
Pln_1        Pln_1        1979  OCT   368.9   368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   368.9
Pln_1        Pln_1        1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  APR   357.0   357.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   357.0
Pln_1        Pln_1        1980  MAY   368.9   368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   368.9
Pln_1        Pln_1        1980  JUN   357.0   357.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   357.0
Pln_1        Pln_1        1980  JUL   368.9   368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   368.9
Pln_1        Pln_1        1980  AUG   368.9   368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   368.9
Pln_1        Pln_1        1980  SEP   357.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   357.0
____________ ____________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Pln_1        Pln_1        1980  TOT  2546.8  2189.8   357.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  2546.8


Plan Summary    ACFT
Plan Number    =     2
Plan Type      =     1 T&C_Requirement
Plan ID        = T&CPln_1
Plan Name      = T&C_Plan
Plan Source    = Pln_1

Src   1   ID = In_Priority    Name = In_Priority_Present        Opr Type =  -1   Source = In_Priority    Status =  On
Src   2   ID = Opr_3          Name = Opr_Reservoir_Release_to   Opr Type =  48   Source = Res_1          Status =  On

                                                   Plan Sources
Plan        River         Year  Mo  From    Plan
========================================================================================================================
=======================
ID          ID                      Exc/Byp Demand Src 1   Src 2   Src 3   Src 4   Src 5   Src 6   Src 7   Src 8   Src
9  Src 10  Src 11  Src 12  Src 13  Src 14  Src 15  Src 16  Src 17  Src 18

   Plan Sources               ReDivert                  Performance
============================ =============================== ========================
Src 19  Src 20  Short  Total Store 1 Store 2 Store 3   Total  Switch  Status   Total
T&CPln_1     T&CPln_1     1979  OCT   368.9   110.7     0.0   110.7     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   110.7     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1979  NOV     0.0   110.7     0.0   110.7     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   110.7     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  APR   357.0   107.1     0.0   107.1     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   107.1     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  MAY   368.9   217.8     0.0   217.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   217.8     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  JUN   357.0   217.8     0.0   217.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   217.8     0.0
0.0     0.0     0.0     Off     Off     0.0
```

```
T&CPln_1      T&CPln_1      1980  JUL   368.9   217.8     0.0   217.8     0.0     0.0     0.0     0.0     0.0     0.0
0.0      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   217.8     0.0
0.0      0.0     0.0     Off     Off     0.0
T&CPln_1      T&CPln_1      1980  AUG   368.9   221.4     0.0   221.4     0.0     0.0     0.0     0.0     0.0     0.0
0.0      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   221.4     0.0
0.0      0.0     0.0     Off     Off     0.0
T&CPln_1      T&CPln_1      1980  SEP     0.0   110.7     0.0   110.7     0.0     0.0     0.0     0.0     0.0     0.0
0.0      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   110.7     0.0
0.0      0.0     0.0     Off     Off     0.0
____________ ____________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______
T&CPln_1      T&CPln_1      1980  TOT  2189.8  1313.9     0.0  1313.9     0.0     0.0     0.0     0.0     0.0     0.0
0.0      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1313.9     0.0
0.0      0.0     0.0     Off     Off     0.0
#
#
# ________________________________________________________________________________
# *.xop        Operational Right Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex11.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 11:24:57
# Time Step:         Monthly
#
# ________________________________________________________________________________

 Operational Right Summary  ACFT

 ID = Opr_1               Name = Opr_Pro_Rata_Exchange_to Opr Type =   24   Admin # =          6.00001
 Source 1 = Dem_2_WR_1    Destination = Pln_1             Year On =    0   Year Off =  9999
YEAR     OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980   368.9     0.0     0.0     0.0     0.0     0.0   357.0   368.9   357.0   368.9   368.9   357.0  2546.8
AVG    368.9     0.0     0.0     0.0     0.0     0.0   357.0   368.9   357.0   368.9   368.9   357.0  2546.8

 Operational Right Summary  ACFT

 ID = Opr_2               Name = Opr_AcctPlan_Release     Opr Type =   28   Admin # =          6.00002
 Source 1 = Pln_1         Destination = Dem_4             Year On =    0   Year Off =  9999
YEAR     OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980   368.9     0.0     0.0     0.0     0.0     0.0   357.0   368.9   357.0   368.9   368.9     0.0  2189.8
AVG    368.9     0.0     0.0     0.0     0.0     0.0   357.0   368.9   357.0   368.9   368.9     0.0  2189.8

 Operational Right Summary  ACFT

 ID = Opr_3               Name = Opr_Reservoir_Release_to Opr Type =   48   Admin # =         50.00000
 Source 1 = Res_1         Destination = T&CPln_1          Year On =    0   Year Off =  9999
YEAR     OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980   110.7   110.7     0.0     0.0     0.0     0.0   107.1   217.8   217.8   217.8   221.4   110.7  1313.9
AVG    110.7   110.7     0.0     0.0     0.0     0.0   107.1   217.8   217.8   217.8   221.4   110.7  1313.9

 Operational Right Summary  ACFT

 ID = Opr_4               Name = Opr_AcctPln-Spill        Opr Type =   29   Admin # =      99999.00000
 Source 1 = Pln_1         Destination = NA                Year On =    0   Year Off =  9999
YEAR     OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   357.0   357.0
AVG      0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   357.0   357.0
```

---

cdssnews@state.co.us

Last updated: 2012

Example 12

```
# Exhibit 12.1
# *.rsp; response file for Statemod Example 12
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                    Name
# _______________________________________ _____________________________
Control                                 = ex12.ctl
River_Network                           = ex12.rin
StreamGage_Station                      = ..\ex1\ex1.ris
Stream_Base_Monthly                     = ..\ex1\ex1.rim
Diversion_Station                       = ..\ex11\ex11.dds
Diversion_Right                         = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                = ..\ex1\ex1.ddm
Reservoir_Station                       = ..\ex2\ex2.res
Reservoir_Right                         = ..\ex2\ex2.rer
Reservoir_Target_Monthly                = ..\ex2\ex2.tam
Evaporation_Monthly                     = ..\ex2\ex2.eva
Instreamflow_Station                    = ..\ex1\ex1.ifs
Instreamflow_Right                      = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly      = ..\ex1\ex1.ifa
Plan_Data                               = ex12.pln
Plan_Return                             = ..\ex11\ex11.prf
Operational_Right                       = ex12.opr
DelayTable_Monthly                      = ..\ex1\ex1.urm
OutputRequest                           = ex12.out

# Exhibit 12.2
# ex*.ctl;  Control file for StateMod Example 12
#
#
  STATEMOD
  StateMod Operating Rule Example - ex12.*
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;    ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;      ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       1     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       6     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       1     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       0     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       0     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       1     : isig    Number of significant digits behind decimal point in output files

# Exhibit 12.3
# *.rin; River node network file for StateMod Example 12
#
# *****************************************************
```

```
#
#
#  Card 1   Control
#  format:  (a12, a24, a12, 1x, a12, 1x, f8.0)
#
#  ID           cstaid:  Station ID
#  Name         stanam:  Station name
#  Downstream   cstadn:  Downstream node ID
#  Comment     comment:  Alternate identifier/comment.
#  GWMax        gwmaxr:  Max recharge limit (cfs) - see iwell in control file.
#
#   ID                Name          DownStream     Comment    GWMax
#---------eb----------------------eb----------exb----------exb------e
Dem_3       Exist. Diver. 3/Inflow  Dem_4
Dem_4       Exist. Diver. 4         T&CPln_1
Dem_5       Exist. Diver. 5/Inflow  Pln_1
Pln_1       Plan Structure          Dem_2
Dem_2       Exist. Diver. 2         Res_1
Res_1       Exist. Reservoir        Res_Pln
Res_Pln     Reservoir Plan          T&CPln_1
T&CPln_1    T&C Plan                Dem_1
Dem_1       Exist. Diver. 1         ISF
ISF         Top Instream Flow       ISF.01
ISF.01      Bottom Instream Flow

# Exhibit 12.4
# ex*.pln;  Plan file for StateMod Example 12
#
# *******************************************************
#     Card 1   Control
#     format:  (a12, a24, a12, 5i8)
#
#     Plan ID:              Pid     Include _ instead of blanks
#     Plan Name:            Pname   Include _ instead of blanks
#     Plan Location         iPsta   River node where the plan is located
#     Plan On/Off:          Pon     On (1) or Off (0) switch
#
#     Plan Type             iPlnTyp  1 = Terms and Conditions (T&C)
#                                    2 = Well Augmentation
#                                    3 = Reservoir Reuse
#                                    4 = Non Reservoir Reuse (e.g., WWTP)
#                                    5 = Reuse to a Reservoir from Tmtn
#                                    6 = Reuse to a Diversion from Tmtn
#                                    7 = Transmountain import
#                                    8 = Recharge Plan
#                                    9 = Out-of-Priority Diversion or Storage
#                                   10 = Special Well Augmentation (e.g., Designated Basin, Coffin Wells, etc.)
#                                   11 = Accounting Plan (e.g., changed water rights)
#                                   12 = Release Limit Plan (e.g., HUP Pool Release Limit)
#
#     Plan Efficiency (%)   Peff    Enter 0 if not used
#                                   Enter 1 to read 12 plan efficiency values (%)
#                                   Enter -1 if data is provided in an Operating Rule file (*.opr)
#                                   Enter 999 to use the source structure's efficiency
#     Plan Return Flow ID   iPrf    Enter 0 if not used
#                                   Enter 1 if data is provided in an Plan Return Flow file (*.prf)
#                                   Enter 999 to use the source structure's return flow pattern
#     Plan Failure Switch   iPfail  Used only for a T&C Plan (iPlntype = 1)
#                                   Enter 0 to not turn plan off if it fails
#                                   Enter 1 to turn a plan off if it fails
#                                   1 = Do stop and accumulate failures to be paid in subsequent time steps
#     Plan Initial Storage  Psto1   Storage in Plan structure at beginning of simulation
#                                   0 for non-Reuse Reservoir plans (iPtype<>3)
#                                   >= 0 for Reuse Reservoir plans (iPtype=3) - set equal to storage in associated
reservoir (*.res) account
#     Plan Source           Psource Source ID of the structure where plan water becomes available
#                                   Note this information is currently used only when the plan type is
#                                   recharge (type 8) from a reservoir
#     Plan Account          iPAcc   Source Account of the structure where plan water becomes available
#                                   Note this information is currently used only when the plan type is
#                                   recharge (type 8) from a reservoir
#
#
# ID        Name                    RiverLoc      ON/Off  iPtype    Peff    iPrf  iPfail   Psto1 Psource     IPAcc
#----------eb----------------------eb----------eb------eb------eb------eb------eb------exb----------eb------e
Pln_1       AccountingPlan          Pln_1              1      11       0       0       0       0 Dem_2         0
Res_Pln     ReservoirAcctingPln     Res_Pln            1       3       0       0       0      25 Res_1         0
T&CPln_1    T&C_Plan                T&CPln_1           1       1      -1       1       0       0 Pln_1         0

# Exhibit 12.5
# *.opr; operating rules file for Statemod Example 12
#      This file lists the operating rules used in model simulation
#
#
#                   GUIDE TO COLUMN ENTRIES
#     ========================================
#          ID            ID number of operating rule that is used to separate operating rule output in *.xop file
#          Name       Name of operating rule - used for descriptive purposes only
```

```
#          Admin#     Administration number used to determine priority of operational water rights relative to other
operations and direct diversion, reservoir, instream flow, and well rights (see tabulation in *.xwr file)
#          # Str      Number of carrier structures, monthly on/off switches, or monthly volumetrics (flag telling
StateMod program the number of entries on next line)
#          On/Off     1 for ON and 0 for OFF
#          Dest ID    Destination of operating rule whose demand is to be met by simulating the operating rule
#          Dest Ac    Account at destination to be met by operating rule - typically 1 for a diversion structure and
account number for reservoir destination
#          Sou1 ID    ID number of primary source of water under which water right is being diverted in operating rule
- typically a water right, reservoir, or Plan structure
#          Sou1 Ac    Account of Sou1 - typically 1 for a diversion structure and account number for reservoir source
#          Sou2 ID    ID of Plan where reusable storage water or reusable ditch credits or terms and conditions
obligations is accounted
#          Sou2 Ac    Percentage of Plan supplies available for operation
#          Type       Rule type corresponding with definitions in Chapter 4 of StateMod documentation
#          ReusePlan  ID of Plan where reusable return flows or diversions to storage are accounted
#          Div Type   'Diversion' indicates pro-rata diversion of source water right priority or exchange of reusable
credits to Dest1
#                        'Depletion' indicates pro-rata diversion of source water right priority consumptive use or
augmentation of upstream diversions at Dest1
#          OprLoss    Percentage of simulated diversion lost in carrier ditch (only applies to certain rules - see
StateMod documentation, Section 4.13)
#          Limit      Capacity limit for carrier structures different from capacity in .dds file (used to represent
constricted conveyance capacity for winter deliveries to reservoirs)
#          Comments   Description of rule type
#
# ID        Name                    NA                    Admin#   # Str  On/Off Dest Id     Dest Ac  Sou1 Id     Sou1
Ac  Sou2 Id     Sou2 Ac     Type ReusePlan    Div Type      OprLoss   Limit Comments
# ---------eb----------------------eb----------exxxxb----------eb------eb------e-b----------eb------e-b----------eb---
---e-b----------eb------eb------exb----------exb----------exb------eb------exb----------
Opr_1       Opr_Pro_Rata_Direct_to_AcctPlan             6.00001      0.       1 Res_1              2 Dem_2_WR_1
10 NA                0      25 Res_Pln      Diversion           0       0       0    9999 Direct Flow Diversion of
Pro-Rata Water Right
     5000.      0.      0.      0.      0.      0.   5000.   5000.   5000.   5000.   5000.   5000.  35000.0

# Exhibit 12.6
# *.out; Output request file for StateMod Example 12
#
# Type (e.g. Diversion, StreamGage, Reservoir, InstreamFlow, Well or All)
#
All
#
# Parameter (e.g. Total_Supply, Sim_EOM, River_Outflow or All)
#
All
#
# ID Name Type and Print Code (0=no, 1=yes);
# Note: id = All prints all
#       id = -999 = stop
#       default is to turn on all stream gages (FLO)
#
All
Dem_3       Exist. Diver. 3/Inflow     DIV     1
Res_1       Exist. Reservoir           RES     1
Res_Pln     Reservoir Plan             OTH     1
Dem_4       Exist. Diver. 4            DIV     1
Dem_5       Exist. Diver. 5/Inflow     DIV     1
Pln_1       Plan Structure             OTH     1
Dem_2       Exist. Diver. 2            DIV     1
T&CPln_1    T&C Plan                   OTH     1
Dem_1       Exist. Diver. 1            DIV     1
ISF         Top Instream Flow          ISF     1
ISF.01      Bottom Instream Flow       ISF     1
-999
#
#
# ________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex12.*
#
# Statemod Version: 12.29.05 Date = 2008/10/23)
# Run date:          11/ 6/ 8 15:56:17
# Time Step:         Monthly
#
# ________________________________________________________________________________

                               Water Budget  ACFT

                Stream                    From/To        From        From       Total              From River        Well
Reservoir   Reservoir       Stream   Reservoir          To        SoilM       Total
 Year   Mo      Inflow       Return   GWStorage        SoilM    Plan (5)      Inflow  Divert (6)     by Well   Depletion
Evaporation     Seepage     Outflow      Change        SoilM      Change     Outflow       Delta      CU (1)    Loss
(2) Pumping (3) Salvage (4)
                   (+)         (+)         (+)         (+)         (+)          NA         (-)         (-)         (-)
(-)         (-)         (-)         (-)         (-)         (-)          NA          NA          NA          NA
NA          NA
```

Year	Mo	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1979	OCT	4000.0	1183.7	0.0	0.0	0.0	5183.7	4174.8	0.0	0.0	0.0	0.0	640.0	368.9	0.0	0.0	5183.7	0.0	1487.4	0.0	0.0	0.0
1979	NOV	4000.0	2511.6	0.0	0.0	0.0	6511.6	5391.6	0.0	0.0	0.0	0.0	1120.0	0.0	0.0	0.0	6511.6	0.0	2095.8	0.0	0.0	0.0
1979	DEC	4000.0	3237.2	0.0	0.0	0.0	7237.2	5797.2	0.0	0.0	0.0	0.0	1440.0	0.0	0.0	0.0	7237.2	0.0	2298.6	0.0	0.0	0.0
1980	JAN	4000.0	3532.4	0.0	0.0	0.0	7532.4	5932.4	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7532.4	0.0	2366.2	0.0	0.0	0.0
1980	FEB	4000.0	3577.5	0.0	0.0	0.0	7577.5	5977.5	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7577.5	0.0	2388.7	0.0	0.0	0.0
1980	MAR	4000.0	3592.5	0.0	0.0	0.0	7592.5	5992.5	0.0	0.0	25.4	0.0	1600.0	-25.4	0.0	0.0	7592.5	0.0	2421.6	0.0	0.0	0.0
1980	APR	4000.0	3478.5	0.0	0.0	0.0	7478.5	5521.5	0.0	0.0	330.9	0.0	1600.0	26.1	0.0	0.0	7478.5	0.0	2491.6	0.0	0.0	0.0
1980	MAY	20000.0	3605.4	0.0	0.0	0.0	23605.4	6500.0	0.0	0.0	280.8	0.0	16360.2	464.3	0.0	0.0	23605.4	0.0	2930.8	0.0	0.0	0.0
1980	JUN	20000.0	3850.0	0.0	0.0	0.0	23850.0	6500.0	0.0	0.0	667.5	0.0	16718.3	-35.8	0.0	0.0	23850.0	0.0	3317.5	0.0	0.0	0.0
1980	JUL	4000.0	3632.8	0.0	0.0	0.0	7632.8	5631.1	0.0	0.0	384.2	0.0	1632.8	-15.3	0.0	0.0	7632.8	0.0	2599.8	0.0	0.0	0.0
1980	AUG	4000.0	3354.0	0.0	0.0	0.0	7354.0	5385.1	0.0	0.0	307.3	0.0	1600.0	61.6	0.0	0.0	7354.0	0.0	2399.9	0.0	0.0	0.0
1980	SEP	4000.0	3276.0	0.0	0.0	0.0	7276.0	5319.0	0.0	0.0	256.3	0.0	1600.0	100.7	0.0	0.0	7276.0	0.0	2315.8	0.0	0.0	0.0
1980	Tot	80000.0	38831.5	0.0	0.0	0.0	118831.5	68122.5	0.0	0.0	2252.5	0.0	47511.3	945.2	0.0	0.0	118831.5	0.0	29113.7	0.0	0.0	0.0

Water Budget ACFT

```
              Stream                    From/To        From        From        Total            From River        Well
Reservoir   Reservoir      Stream    Reservoir          To        SoilM        Total
 Year   Mo      Inflow       Return   GWStorage       SoilM    Plan (5)       Inflow  Divert (6)     by Well   Depletion
Evaporation     Seepage      Outflow       Change        SoilM       Change      Outflow        Delta      CU (1)      Loss
(2) Pumping (3) Salvage (4)
```

Year	Mo	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
		(+)	(+)	(+)	(+)	(+)	NA	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	NA	NA	NA	NA	NA	NA
Ave	OCT	4000.0	1183.7	0.0	0.0	0.0	5183.7	4174.8	0.0	0.0	0.0	0.0	640.0	368.9	0.0	0.0	5183.7	0.0	1487.4	0.0	0.0	0.0
Ave	NOV	4000.0	2511.6	0.0	0.0	0.0	6511.6	5391.6	0.0	0.0	0.0	0.0	1120.0	0.0	0.0	0.0	6511.6	0.0	2095.8	0.0	0.0	0.0
Ave	DEC	4000.0	3237.2	0.0	0.0	0.0	7237.2	5797.2	0.0	0.0	0.0	0.0	1440.0	0.0	0.0	0.0	7237.2	0.0	2298.6	0.0	0.0	0.0
Ave	JAN	4000.0	3532.4	0.0	0.0	0.0	7532.4	5932.4	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7532.4	0.0	2366.2	0.0	0.0	0.0
Ave	FEB	4000.0	3577.5	0.0	0.0	0.0	7577.5	5977.5	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7577.5	0.0	2388.7	0.0	0.0	0.0
Ave	MAR	4000.0	3592.5	0.0	0.0	0.0	7592.5	5992.5	0.0	0.0	25.4	0.0	1600.0	-25.4	0.0	0.0	7592.5	0.0	2421.6	0.0	0.0	0.0
Ave	APR	4000.0	3478.5	0.0	0.0	0.0	7478.5	5521.5	0.0	0.0	330.9	0.0	1600.0	26.1	0.0	0.0	7478.5	0.0	2491.6	0.0	0.0	0.0
Ave	MAY	20000.0	3605.4	0.0	0.0	0.0	23605.4	6500.0	0.0	0.0	280.8	0.0	16360.2	464.3	0.0	0.0	23605.4	0.0	2930.8	0.0	0.0	0.0

```
Ave   JUN      20000.0      3850.0         0.0         0.0         0.0     23850.0      6500.0         0.0         0.0
667.5         0.0     16718.3       -35.8         0.0         0.0     23850.0         0.0      3317.5         0.0
0.0         0.0
Ave   JUL       4000.0      3632.8         0.0         0.0         0.0      7632.8      5631.1         0.0         0.0
384.2         0.0      1632.8       -15.3         0.0         0.0      7632.8         0.0      2599.8         0.0
0.0         0.0
Ave   AUG       4000.0      3354.0         0.0         0.0         0.0      7354.0      5385.1         0.0         0.0
307.3         0.0      1600.0        61.6         0.0         0.0      7354.0         0.0      2399.9         0.0
0.0         0.0
Ave   SEP       4000.0      3276.0         0.0         0.0         0.0      7276.0      5319.0         0.0         0.0
256.3         0.0      1600.0       100.7         0.0         0.0      7276.0         0.0      2315.8         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
Ave   Tot      80000.0     38831.5         0.0         0.0         0.0    118831.5     68122.5         0.0         0.0
2252.5         0.0     47511.3       945.2         0.0         0.0    118831.5         0.0     29113.7         0.0
0.0         0.0
                                                                                                -357.0 (6)
                                                                                            ___________
                                                                                            67765.5

  Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency
           + max (Resevoir Evaporation (Evap), 0.0).
        (2) Loss is not part of the Stream Water Balance.
            It is the portion of a diversion, well pumping
            and reservoir seepage that does not return to
            the stream
        (3) Pumping is not part of the Stream Balance.
            Its impact on the stream is included in the From River by Well and Well Depletion columns
        (4) Salvage is not part of the Stream Water Balance.
            It is the portion of well pumping that does not impact the stream
        (5) From Plan is water from a reuse plan.
        (6) Divert does not include diversions by an
            instream flow or a T&C plan. Also to avoid
            double accounting with reservoir storage it has
            reduced by:
              1    2547. af/yr for Diverted to Storage.
              2       0. af/yr for a Diversion Carrier.
              3       0. af/yr for a Reservior Carrier.
              4       0. af/yr for a Plan Carrier.
                   -357. af/yr Total
#
# ________________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex12.*
#
# Statemod Version:   12.289 Date = 2008/09/12)
# Run date:           9/15/ 8 15:10:39
# Time Step:         Monthly
#
# ________________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =         8
#
#
______________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
            operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
```

```
#   Rank ID                Type         Admin #  On/Off  Str ID #1    Str ID #2          Amount Right Name
Str Name #1                Str Name #2
#    (1) (2)                (3)             (4)     (5)  (6)          (7)                   (8) (9)
(10)                        (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

       1 Dem_1_WR_1          3         2.00000       1  Dem_1        -1              100.000 c M&I Demand _1
Municipal Demand _1
       2 Dem_2_WR_1          3         6.00000       0  Dem_2        -1               60.000 c Irrigation Demand _2
Irrigation Demand _2

       3 Opr_1             125         6.00001       1  -1           -1               -1.000 x
Opr_Pro_Rata_Direct_to_A

       4 Dem_3_WR_1          3         7.00000       1  Dem_3        -1              100.000 c Irrigation Demand _3
Irrigation Demand _3
       5 ISF_WR_1            1         9.00000       1  ISF          -1               65.500 c Instream Flow 1
Instream Demand
       6 Dem_4_WR_1          3        10.00000       1  Dem_4        -1              100.000 c Irrigation Demand _4
Irrigation Demand _4
       7 Res_1_WR_1          2        15.00000       1  Res_1        -1           100000.000 a Reservoir_1
Reservoir_1
       8 Dem_5_WR_1          3        15.00000       1  Dem_5        -1              100.000 c Irrigation Demand _5
Irrigation Demand _5
#
#
# __________________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex12.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 12:12: 6
# Time Step:         Monthly
#
# __________________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3             -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                       Demand               From River By                    From Carrier By
Carried                 ============== ===============================
Structure   River                     ============== ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3       1979  OCT  1000.0   500.0   543.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   543.7   456.3   228.2   271.8     0.0   271.8     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
543.7     0.0   456.3     0.0 Dem_1            100.000
Dem_3       Dem_3       1979  NOV  1000.0   500.0   847.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   847.9   152.1    76.1   423.9     0.0   423.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
847.9     0.0   152.1     0.0 Dem_1            100.000
Dem_3       Dem_3       1979  DEC  1000.0   500.0   949.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   949.3    50.7    25.4   474.6     0.0   474.6     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
949.3     0.0    50.7     0.0 Dem_1            100.000
Dem_3       Dem_3       1980  JAN  1000.0   500.0   983.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   983.1    16.9     8.5   491.5     0.0   491.5     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
983.1     0.0    16.9     0.0 Dem_1            100.000
Dem_3       Dem_3       1980  FEB  1000.0   500.0   994.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   994.4     5.6     2.8   497.2     0.0   497.2     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
994.4     0.0     5.6     0.0 Dem_1            100.000
```

```
Dem_3       Dem_3       1980  MAR  1000.0   500.0   998.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   998.1     1.9     0.9   499.1     0.0   499.1     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
998.1     0.0     1.9     0.0 Dem_1          100.000
Dem_3       Dem_3       1980  APR  1000.0   500.0   880.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   880.4   119.6    59.8   440.2     0.0   440.2     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
880.4     0.0   119.6     0.0 Dem_1          100.000
Dem_3       Dem_3       1980  MAY  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  3970.1 NA                -1.000
Dem_3       Dem_3       1980  JUN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  4000.0 NA                -1.000
Dem_3       Dem_3       1980  JUL  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit      -1.000
Dem_3       Dem_3       1980  AUG  1000.0   500.0   846.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   846.3   153.7    76.9   423.1     0.0   423.1     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
846.3     0.0   153.7     0.0 Dem_1          100.000
Dem_3       Dem_3       1980  SEP  1000.0   500.0   829.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   829.7   170.3    85.1   414.9     0.0   414.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
829.7     0.0   170.3     0.0 Dem_1          100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_3       Dem_3       1980  TOT 12000.0  6000.0 10872.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 10872.9  1127.1   563.6  5436.4     0.0  5436.4     0.0     0.0 20000.0     0.0     0.0     0.0 20000.0
10872.9     0.0  9127.1  7970.1 NA                -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
PAGE NO.   2

    STRUCTURE ID (0 = total)  : Dem_4              2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4        Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4        Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                  From Carrier By
Carried                 ============== ==============================
Structure   River                    ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To     Total           Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
==================================== ========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_4       Dem_4       1979  OCT   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   456.3     0.0   135.9     0.0     0.0   592.2
0.0     0.0   592.2     0.0 Dem_1          100.000
Dem_4       Dem_4       1979  NOV   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   152.1     0.0   347.9     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1          100.000
Dem_4       Dem_4       1979  DEC   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    50.7     0.0   449.3     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1          100.000
Dem_4       Dem_4       1980  JAN   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    16.9     0.0   483.1     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1          100.000
Dem_4       Dem_4       1980  FEB   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     5.6     0.0   494.4     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1          100.000
Dem_4       Dem_4       1980  MAR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     1.9     0.0   498.1     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1          100.000
Dem_4       Dem_4       1980  APR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   119.6     0.0   469.6     0.0     0.0   589.3
0.0     0.0   589.3     0.0 Dem_1          100.000
Dem_4       Dem_4       1980  MAY   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   470.1     0.0     0.0  4470.1
500.0     0.0  3970.1  3970.1 NA                -1.000
Dem_4       Dem_4       1980  JUN   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  4000.0 NA                -1.000
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Dem_4       Dem_4       1980  JUL   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF             100.000
Dem_4       Dem_4       1980  AUG   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   153.7     0.0   461.6     0.0     0.0   615.3
0.0     0.0   615.3     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   170.3     0.0   419.0     0.0     0.0   589.3
0.0     0.0   589.3     0.0 ISF             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_4       Dem_4       1980  TOT  5500.0  2750.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0  4500.0  2250.0   500.0     0.0   500.0     0.0  9127.1     0.0  5229.0     0.0     0.0 14356.1
1000.0     0.0 13356.1  7970.1 NA                -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
PAGE NO.   3

    STRUCTURE ID (0 = total)  : Dem_5              -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand               From River By                   From Carrier By
Carried                 ============== ==============================
Structure   River                     ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== ==========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 11254.9 NA               -1.000
Dem_5       Dem_5       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 11368.3 NA               -1.000
Dem_5       Dem_5       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Res_1        100000.000
Dem_5       Dem_5       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 ISF             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
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Dem_5       Dem_5       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0 22623.1 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
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    STRUCTURE ID (0 = total)  : Pln_1          10001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : 6756756756756756756756756756756756756756756756756756756756756756756756756756756
    RIVER LOCATION - FROM     : Pln_1       Plan Structure
    RIVER LOCATION - TO       : Pln_1       Plan Structure



Shortage                 Water Use
                                         Demand              From River By                   From Carrier By
Carried                 ============== ==============================
Structure   River                    ============== ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Pln_1       Pln_1       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 11254.9 NA               -1.000
Pln_1       Pln_1       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0 11368.3 NA               -1.000
Pln_1       Pln_1       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
___________ ___________  _____ _____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Pln_1       Pln_1       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0 22623.1 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
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    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2       Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2       Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
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      Well Rights            :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand              From River By                    From Carrier By
Carried                 ============== ===============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID         ID          Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2       1979  OCT  3000.0  1500.0  1631.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1631.1  1368.9   684.5   815.5     0.0   815.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
1631.1     0.0  1368.9     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1979  NOV  3000.0  1500.0  2543.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2543.7   456.3   228.2  1271.8     0.0  1271.8     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2543.7     0.0   456.3     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1979  DEC  3000.0  1500.0  2847.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2847.9   152.1    76.1  1423.9     0.0  1423.9     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2847.9     0.0   152.1     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  JAN  3000.0  1500.0  2949.3     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2949.3    50.7    25.4  1474.6     0.0  1474.6     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2949.3     0.0    50.7     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  FEB  3000.0  1500.0  2983.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2983.1    16.9     8.5  1491.5     0.0  1491.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2983.1     0.0    16.9     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  MAR  3000.0  1500.0  2994.4     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2994.4     5.6     2.8  1497.2     0.0  1497.2     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2994.4     0.0     5.6     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  APR  3000.0  1500.0  2641.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2641.1   358.9   179.5  1320.5     0.0  1320.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2641.1     0.0   358.9     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  MAY  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0 11254.9 NA                -1.000
Dem_2       Dem_2       1980  JUN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0 11368.3 NA                -1.000
Dem_2       Dem_2       1980  JUL  3000.0  1500.0  2631.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2631.1   368.9   184.5  1315.5     0.0  1315.5     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2631.1     0.0   368.9     0.0 Res_1         100000.000
Dem_2       Dem_2       1980  AUG  3000.0  1500.0  2538.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2538.8   461.2   230.6  1269.4     0.0  1269.4     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2538.8     0.0   461.2     0.0 Cap/Wr_Limit      -1.000
Dem_2       Dem_2       1980  SEP  3000.0  1500.0  2489.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2489.2   510.8   255.4  1244.6     0.0  1244.6     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2489.2     0.0   510.8     0.0 Cap/Wr_Limit      -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_2       Dem_2       1980  TOT 36000.0 18000.0 32249.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 32249.7  3750.3  1875.2 16124.8     0.0 16124.8     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
32249.7     0.0 27750.3 22623.1 NA                -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
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    STRUCTURE ID (0 = total)  : Res_1           7501
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Reservoir_1
    RIVER LOCATION - FROM     : Res_1        Exist. Reservoir
    RIVER LOCATION - TO       : Res_1        Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.



Shortage                 Water Use
                                        Demand              From River By                    From Carrier By
Carried                 ============== ===============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID         ID          Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
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 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Res_1      Res_1       1979  OCT     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9     0.0  1368.9     0.0     0.0     0.0     0.0  1368.9
368.9     0.0  1000.0     0.0 Dem_1          100.000
Res_1      Res_1       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   456.3     0.0     0.0     0.0     0.0   456.3
0.0     0.0   456.3     0.0 Dem_1          100.000
Res_1      Res_1       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   152.1     0.0     0.0     0.0     0.0   152.1
0.0     0.0   152.1     0.0 Dem_1          100.000
Res_1      Res_1       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    50.7     0.0     0.0     0.0     0.0    50.7
0.0     0.0    50.7     0.0 Dem_1          100.000
Res_1      Res_1       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.9     0.0     0.0     0.0     0.0    16.9
0.0     0.0    16.9     0.0 Dem_1          100.000
Res_1      Res_1       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     5.6     0.0     0.0     0.0     0.0     5.6
0.0     0.0     5.6     0.0 Dem_1          100.000
Res_1      Res_1       1980  APR     0.0     0.0     0.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   357.0     0.0     0.0     0.0     0.0   357.0     0.0   358.9     0.0     0.0     0.0     0.0   358.9
357.0     0.0     1.9     0.0 Dem_1          100.000
Res_1      Res_1       1980  MAY     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9     0.0 12000.0     0.0     0.0     0.0     0.0 12000.0
745.1     0.0 11254.9 11254.9 NA              -1.000
Res_1      Res_1       1980  JUN     0.0     0.0     0.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   357.0     0.0     0.0     0.0     0.0   357.0     0.0 12000.0     0.0     0.0     0.0     0.0 12000.0
631.7     0.0 11368.3 11368.3 NA              -1.000
Res_1      Res_1       1980  JUL     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9     0.0   368.9     0.0     0.0     0.0     0.0   368.9
368.9     0.0     0.0     0.0 NA              -1.000
Res_1      Res_1       1980  AUG     0.0     0.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0     0.0
0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9     0.0   461.2     0.0     0.0     0.0     0.0   461.2
368.9     0.0    92.2     0.0 Dem_1          100.000
Res_1      Res_1       1980  SEP     0.0     0.0     0.0     0.0   357.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   357.0     0.0     0.0     0.0     0.0   357.0     0.0   510.8     0.0     0.0     0.0     0.0   510.8
357.0     0.0   153.7     0.0 ISF            100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Res_1      Res_1       1980  TOT     0.0     0.0     0.0     0.0  2546.8     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2546.8     0.0     0.0     0.0     0.0  2546.8     0.0 27750.3     0.0     0.0     0.0     0.0 27750.3
3197.7     0.0 24552.6 22623.1 NA              -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
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    STRUCTURE ID (0 = total)  : Res_Pln         10002
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : 6776776776776776776776776776776776776776776776776776776776776776776776776776677677677
    RIVER LOCATION - FROM     : Res_Pln      Reservoir Plan
    RIVER LOCATION - TO       : Res_Pln      Reservoir Plan


Shortage                 Water Use
                                        Demand               From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID         ID          Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Res_Pln    Res_Pln     1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1000.0     0.0     0.0     0.0     0.0  1000.0
0.0     0.0  1000.0     0.0 NA              -1.000
Res_Pln    Res_Pln     1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   456.3     0.0     0.0     0.0     0.0   456.3
0.0     0.0   456.3     0.0 NA              -1.000
Res_Pln    Res_Pln     1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   152.1     0.0     0.0     0.0     0.0   152.1
0.0     0.0   152.1     0.0 NA              -1.000
Res_Pln    Res_Pln     1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    50.7     0.0     0.0     0.0     0.0    50.7
0.0     0.0    50.7     0.0 NA              -1.000
Res_Pln    Res_Pln     1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    16.9     0.0     0.0     0.0     0.0    16.9
0.0     0.0    16.9     0.0 NA              -1.000
Res_Pln    Res_Pln     1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     5.6     0.0     0.0     0.0     0.0     5.6
0.0     0.0     5.6     0.0 NA              -1.000
```

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Res_Pln     Res_Pln      1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     1.9     0.0     0.0     0.0     0.0     1.9
0.0     0.0     1.9     0.0 NA              -1.000
Res_Pln     Res_Pln      1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 11254.9     0.0     0.0     0.0     0.0 11254.9
0.0     0.0 11254.9 11254.9 NA              -1.000
Res_Pln     Res_Pln      1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 11368.3     0.0     0.0     0.0     0.0 11368.3
0.0     0.0 11368.3 11368.3 NA              -1.000
Res_Pln     Res_Pln      1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA              -1.000
Res_Pln     Res_Pln      1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    92.2     0.0     0.0     0.0     0.0    92.2
0.0     0.0    92.2     0.0 NA              -1.000
Res_Pln     Res_Pln      1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   153.7     0.0     0.0     0.0     0.0   153.7
0.0     0.0   153.7     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Res_Pln     Res_Pln      1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 24552.6     0.0     0.0     0.0     0.0 24552.6
0.0     0.0 24552.6 22623.1 NA              -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
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    STRUCTURE ID (0 = total)  : T&CPln_1        10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : 678678678678678678678678678678678678678678678678678678678678678678678678
    RIVER LOCATION - FROM     : T&CPln_1     T&C Plan
    RIVER LOCATION - TO       : T&CPln_1     T&C Plan



Shortage                 Water Use
                                        Demand               From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
==================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
T&CPln_1    T&CPln_1     1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1592.2     0.0     0.0     0.0     0.0  1592.2
0.0     0.0  1592.2     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   956.3     0.0     0.0     0.0     0.0   956.3
0.0     0.0   956.3     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   652.1     0.0     0.0     0.0     0.0   652.1
0.0     0.0   652.1     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   550.7     0.0     0.0     0.0     0.0   550.7
0.0     0.0   550.7     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   516.9     0.0     0.0     0.0     0.0   516.9
0.0     0.0   516.9     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   505.6     0.0     0.0     0.0     0.0   505.6
0.0     0.0   505.6     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   591.1     0.0     0.0     0.0     0.0   591.1
0.0     0.0   591.1     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15225.0     0.0   125.0     0.0     0.0 15350.0
0.0     0.0 15350.0 12332.7 NA              -1.000
T&CPln_1    T&CPln_1     1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15368.3     0.0   250.0     0.0     0.0 15618.3
0.0     0.0 15618.3 12820.7 NA              -1.000
T&CPln_1    T&CPln_1     1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0   125.0     0.0     0.0   625.0
0.0     0.0   625.0     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   707.5     0.0     0.0     0.0     0.0   707.5
0.0     0.0   707.5     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   743.0     0.0     0.0     0.0     0.0   743.0
0.0     0.0   743.0     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
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T&CPln_1    T&CPln_1     1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 37908.8     0.0   500.0     0.0     0.0 38408.8
0.0     0.0 38408.8 25153.4 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
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    STRUCTURE ID (0 = total)  : Dem_1              5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand               From River By                     From Carrier By
Carried                ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                   Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1592.2     0.0   407.8     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1979  NOV  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   956.3     0.0  1043.7     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1979  DEC  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   652.1     0.0  1347.9     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1980  JAN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   550.7     0.0  1449.3     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1980  FEB  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   516.9     0.0  1483.1     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1980  MAR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   505.6     0.0  1494.4     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1980  APR  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   591.1     0.0  1408.9     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1980  MAY  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0 15350.0     0.0  1410.3     0.0     0.0 16760.2
2000.0     0.0 14760.2 12332.7 NA               -1.000
Dem_1       Dem_1        1980  JUN  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0 15618.3     0.0  1500.0     0.0     0.0 17118.3
2000.0     0.0 15118.3 12820.7 NA               -1.000
Dem_1       Dem_1        1980  JUL  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   625.0     0.0  1407.8     0.0     0.0  2032.8
2000.0     0.0    32.8     0.0 NA               -1.000
Dem_1       Dem_1        1980  AUG  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   707.5     0.0  1292.5     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
Dem_1       Dem_1        1980  SEP  2000.0   400.0  2000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   743.0     0.0  1257.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ __________
Dem_1       Dem_1        1980  TOT 24000.0  4800.0 24000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 24000.0     0.0     0.0  4800.0     0.0 19200.0     0.0 38408.8     0.0 15502.5     0.0     0.0 53911.3
24000.0     0.0 29911.3 25153.4 NA               -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
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    STRUCTURE ID (0 = total)  : ISF             5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF          Top Instream Flow
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    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand             From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                               Station Balance
==================================== =========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF          1979  OCT  4027.5     0.0   640.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   640.0  3387.5     0.0     0.0     0.0   640.0     0.0     0.0     0.0   640.0     0.0     0.0   640.0
640.0     0.0   640.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1979  NOV  3897.6     0.0  1120.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1120.0  2777.6     0.0     0.0     0.0  1120.0     0.0     0.0     0.0  1120.0     0.0     0.0  1120.0
1120.0     0.0  1120.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1979  DEC  4027.5     0.0  1440.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1440.0  2587.5     0.0     0.0     0.0  1440.0     0.0     0.0     0.0  1440.0     0.0     0.0  1440.0
1440.0     0.0  1440.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  JAN  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  FEB  3637.7     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2037.7     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  MAR  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  APR  3897.6     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2297.6     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  MAY  4027.5     0.0  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0 14760.2     0.0  1600.0     0.0     0.0 16360.2
4027.5     0.0 16360.2 12332.7 NA                -1.000
ISF         ISF          1980  JUN  3897.6     0.0  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0 15118.3     0.0  1600.0     0.0     0.0 16718.3
3897.6     0.0 16718.3 12820.7 NA                -1.000
ISF         ISF          1980  JUL  4027.5     0.0  1632.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1632.8  2394.7     0.0     0.0     0.0  1632.8     0.0    32.8     0.0  1600.0     0.0     0.0  1632.8
1632.8     0.0  1632.8     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  AUG  4027.5     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2427.5     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
ISF         ISF          1980  SEP  3897.6     0.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1600.0  2297.6     0.0     0.0     0.0  1600.0     0.0     0.0     0.0  1600.0     0.0     0.0  1600.0
1600.0     0.0  1600.0     0.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
ISF         ISF          1980  TOT 47420.5     0.0 22357.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 22357.8 25062.7     0.0     0.0     0.0 22357.8     0.0 29911.3     0.0 17600.0     0.0     0.0 47511.3
22357.8     0.0 47511.3 25153.4 NA                -1.000

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
PAGE NO.  11

    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Bottom Instream Flow
    RIVER LOCATION - FROM     : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow



Shortage                 Water Use
                                        Demand             From River By                      From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                               Station Balance
```

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==================================== ===========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   640.0     0.0     0.0     0.0     0.0   640.0
0.0     0.0   640.0     0.0 NA              -1.000
Baseflow    ISF.01       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1120.0     0.0     0.0     0.0     0.0  1120.0
0.0     0.0  1120.0     0.0 NA              -1.000
Baseflow    ISF.01       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1440.0     0.0     0.0     0.0     0.0  1440.0
0.0     0.0  1440.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 16360.2     0.0     0.0     0.0     0.0 16360.2
0.0     0.0 16360.2 12332.7 NA              -1.000
Baseflow    ISF.01       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 16718.3     0.0     0.0     0.0     0.0 16718.3
0.0     0.0 16718.3 12820.7 NA              -1.000
Baseflow    ISF.01       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1632.8     0.0     0.0     0.0     0.0  1632.8
0.0     0.0  1632.8     0.0 NA              -1.000
Baseflow    ISF.01       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
Baseflow    ISF.01       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Baseflow    ISF.01       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 47511.3     0.0     0.0     0.0     0.0 47511.3
0.0     0.0 47511.3 25153.4 NA              -1.000
#
#
# ______________________________________________________________________________
# *.xre       Reservoir Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex12.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 12:12: 6
# Time Step:         Monthly
#
# ______________________________________________________________________________

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
PAGE NO.   1

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  0  100000.; where account 0 is the total
    RESERVOIR OWNER           : Total
    RIVER LOCATION            : Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                  _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.

                                                                                                      From Storage
to                                                              Station Balance
                                            From River by            From Carrier by
_______________________                                Targt_0     BOM ________________________________________
                            Initial _______________________________ _______________________  Total   River   River
Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                   Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For Exc
for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo       NA      (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-)
(-)      NA     (-)     (-)       NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                 ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)    (11)
(12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
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___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           0 1979  OCT 50000.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9     0.0     0.0
0.0     0.0     0.0     0.0 50368.9100000.0 50000.0  1368.9     0.0   368.9     0.0  1000.0
Res_1           0 1979  NOV 50368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 50368.9100000.0 49631.1   456.3     0.0     0.0     0.0   456.3
Res_1           0 1979  DEC 50368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 50368.9100000.0 49631.1   152.1     0.0     0.0     0.0   152.1
Res_1           0 1980  JAN 50368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 50368.9100000.0 49631.1    50.7     0.0     0.0     0.0    50.7
Res_1           0 1980  FEB 50368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 50368.9100000.0 49631.1    16.9     0.0     0.0     0.0    16.9
Res_1           0 1980  MAR 50368.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    25.4     0.0 50343.5100000.0 49631.1     5.6     0.0     0.0     0.0     5.6
Res_1           0 1980  APR 50343.5     0.0     0.0   357.0     0.0     0.0     0.0     0.0   357.0     0.0     0.0
0.0     0.0   330.9     0.0 50369.7100000.0 49631.1   358.9     0.0   357.0     0.0     1.9
Res_1           0 1980  MAY 50369.7   376.2     0.0   368.9     0.0     0.0     0.0     0.0   745.1     0.0     0.0
0.0     0.0   280.8     0.0 50834.0100000.0 49631.1 12000.0     0.0   745.1     0.0 11254.9
Res_1           0 1980  JUN 50834.0   274.7     0.0   357.0     0.0     0.0     0.0     0.0   631.7     0.0     0.0
0.0     0.0   667.5     0.0 50798.2100000.0 49254.9 12000.0     0.0   631.7     0.0 11368.3
Res_1           0 1980  JUL 50798.2     0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9     0.0     0.0
0.0     0.0   384.2     0.0 50782.9100000.0 48980.2   368.9     0.0   368.9     0.0     0.0
Res_1           0 1980  AUG 50782.9     0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9     0.0     0.0
0.0     0.0   307.3     0.0 50844.5100000.0 48980.2   461.2     0.0   368.9     0.0    92.2
Res_1           0 1980  SEP 50844.5     0.0     0.0   357.0     0.0     0.0     0.0     0.0   357.0     0.0     0.0
0.0     0.0   256.3     0.0 50945.3100000.0 48980.2   510.8     0.0   357.0     0.0   153.7
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           0 1980  TOT 50000.0   650.9     0.0  2546.8     0.0     0.0     0.0     0.0  3197.7     0.0     0.0
0.0     0.0  2252.5     0.0 50945.3    -1.0    -1.0 27750.3     0.0  3197.7     0.0 24552.6

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
PAGE NO.   2

    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  1   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_1
    RIVER LOCATION            : Exist. Reservoir

                                                                                                       From Storage
to                                                                 Station Balance
                                                    From River by           From Carrier by
_______________________                                       Targt_0     BOM _______________________________________
                            Initial _______________________________ ___________________________  Total   River   River
Carrier   Total          Seep &     EOM  Stor_n  Decree   River   River   River   River   River
Reservoir                   Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For Exc
for Use Release    Evap   Spill Content   Limit   Limit  Inflow Release  Divert by Well Outflow
ID             Acc Year   Mo      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)      NA     (-)     (-)
(-)      NA     (-)     (-)       NA      NA      NA     (+)     (+)     (-)     (-)      NA
                                ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)    (11)
(12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1979  OCT 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49975.0 50000.0 50000.0  1368.9     0.0   368.9     0.0  1000.0
Res_1           1 1979  NOV 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49975.0 49631.1 49631.1   456.3     0.0     0.0     0.0   456.3
Res_1           1 1979  DEC 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49975.0 49631.1 49631.1   152.1     0.0     0.0     0.0   152.1
Res_1           1 1980  JAN 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49975.0 49631.1 49631.1    50.7     0.0     0.0     0.0    50.7
Res_1           1 1980  FEB 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 49975.0 49631.1 49631.1    16.9     0.0     0.0     0.0    16.9
Res_1           1 1980  MAR 49975.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0    25.2     0.0 49949.8 49631.1 49631.1     5.6     0.0     0.0     0.0     5.6
Res_1           1 1980  APR 49949.8     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   326.0     0.0 49623.8 49656.5 49631.1   358.9     0.0   357.0     0.0     1.9
Res_1           1 1980  MAY 49623.8   376.2     0.0     0.0     0.0     0.0     0.0     0.0   376.2     0.0     0.0
0.0     0.0   274.7     0.0 49725.3 49630.3 49631.1 12000.0     0.0   745.1     0.0 11254.9
Res_1           1 1980  JUN 49725.3   274.7     0.0     0.0     0.0     0.0     0.0     0.0   274.7     0.0     0.0
0.0     0.0   648.5     0.0 49351.5 49166.0 49254.9 12000.0     0.0   631.7     0.0 11368.3
Res_1           1 1980  JUL 49351.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   370.6     0.0 48980.9 49201.8 48980.2   368.9     0.0   368.9     0.0     0.0
Res_1           1 1980  AUG 48980.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   294.3     0.0 48686.6 49217.1 48980.2   461.2     0.0   368.9     0.0    92.2
Res_1           1 1980  SEP 48686.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   243.7     0.0 48442.9 49155.5 48980.2   510.8     0.0   357.0     0.0   153.7
___________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1           1 1980  TOT 49975.0   650.9     0.0     0.0     0.0     0.0     0.0     0.0   650.9     0.0     0.0
0.0     0.0  2183.0     0.0 48442.9    -1.0    -1.0 27750.3     0.0  3197.7     0.0 24552.6

   Reservoir Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex12.*
PAGE NO.   3
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    RESERVOIR ID              : Res_1
    RESERVOIR NAME            : Reservoir_1
    RESERVOIR ACCOUNT & AMOUNT:  2   50000.; where account 0 is the total
    RESERVOIR OWNER           : Res_1 Own_2
    RIVER LOCATION            : Exist. Reservoir

                                                                                                                    From Storage
to                                                                Station Balance
                                             From River by           From Carrier by
_______________________                                 Targt_0     BOM _______________________________________
                            Initial _______________________________ _______________________  Total   River   River
Carrier   Total          Seep &     EOM  Stor_n  Decree    River   River   River   River   River
Reservoir                   Storage Priorty Storage Exc_Pln    Loss Priorty Sto_Exc    Loss  Supply For Use For Exc
for Use Release    Evap   Spill Content   Limit    Limit  Inflow Release  Divert by Well Outflow
ID            Acc Year   Mo      NA     (+)     (+)     (+)     (-)     (+)     (+)     (-)     NA     (-)     (-)
(-)      NA     (-)     (-)      NA      NA      NA     (+)     (+)     (-)     (-)      NA
                               ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)    (11)
(12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)
__________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1979  OCT    25.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9     0.0     0.0
0.0     0.0     0.0     0.0   393.9 50000.0     0.0  1368.9     0.0   368.9     0.0  1000.0
Res_1          2 1979  NOV   393.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0   393.9 49631.1     0.0   456.3     0.0     0.0     0.0   456.3
Res_1          2 1979  DEC   393.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0   393.9 49631.1     0.0   152.1     0.0     0.0     0.0   152.1
Res_1          2 1980  JAN   393.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0   393.9 49631.1     0.0    50.7     0.0     0.0     0.0    50.7
Res_1          2 1980  FEB   393.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0   393.9 49631.1     0.0    16.9     0.0     0.0     0.0    16.9
Res_1          2 1980  MAR   393.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.2     0.0   393.7 49631.1     0.0     5.6     0.0     0.0     0.0     5.6
Res_1          2 1980  APR   393.7     0.0     0.0   357.0     0.0     0.0     0.0     0.0   357.0     0.0     0.0
0.0     0.0     4.9     0.0   745.9 49656.5     0.0   358.9     0.0   357.0     0.0     1.9
Res_1          2 1980  MAY   745.9     0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9     0.0     0.0
0.0     0.0     6.1     0.0  1108.7 49630.3     0.0 12000.0     0.0   745.1     0.0 11254.9
Res_1          2 1980  JUN  1108.7     0.0     0.0   357.0     0.0     0.0     0.0     0.0   357.0     0.0     0.0
0.0     0.0    19.0     0.0  1446.7 49166.0     0.0 12000.0     0.0   631.7     0.0 11368.3
Res_1          2 1980  JUL  1446.7     0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9     0.0     0.0
0.0     0.0    13.6     0.0  1802.0 49201.8     0.0   368.9     0.0   368.9     0.0     0.0
Res_1          2 1980  AUG  1802.0     0.0     0.0   368.9     0.0     0.0     0.0     0.0   368.9     0.0     0.0
0.0     0.0    13.0     0.0  2157.9 49217.1     0.0   461.2     0.0   368.9     0.0    92.2
Res_1          2 1980  SEP  2157.9     0.0     0.0   357.0     0.0     0.0     0.0     0.0   357.0     0.0     0.0
0.0     0.0    12.6     0.0  2502.3 49155.5     0.0   510.8     0.0   357.0     0.0   153.7
__________  ____ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_1          2 1980  TOT    25.0     0.0     0.0  2546.8     0.0     0.0     0.0     0.0  2546.8     0.0     0.0
0.0     0.0    69.5     0.0  2502.3    -1.0    -1.0 27750.3     0.0  3197.7     0.0 24552.6
#
#
# _______________________________________________________________________________
# *.xpl       Plan
#
#   STATEMOD
#   StateMod Operating Rule Example - ex12.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 12:12: 6
# Time Step:         Monthly
#
# _______________________________________________________________________________


Plan Summary    ACFT
Plan Number    =     1
Plan Type      =    11 Accounting_Plan
Plan ID        = Pln_1
Plan Name      = AccountingPlan
Plan Source    = Dem_2


                                            Plan Uses
Plan        River         Year  Mo  Supply
================================================================================================================
===============================
ID          ID                      Total   Use 1   Use 2   Use 3   Use 4   Use 5   Use 6   Use 7   Use 8   Use 9  Use
10  Use 11  Use 12  Use 13  Use 14  Use 15  Use 16  Use 17  Use 18  Use 19

   Plan Uses
===============
Use 20   Total
Pln_1       Pln_1       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1       Pln_1       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1       Pln_1       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
```

```
Pln_1        Pln_1        1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
Pln_1        Pln_1        1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
____________ ____________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Pln_1        Pln_1        1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0


Plan Summary    ACFT
Plan Number    =     2
Plan Type      =     3 Reuse_Reservoir
Plan ID        = Res_Pln
Plan Name      = ReservoirAcctingPln
Plan Source    = Res_1

Use   1   ID = NA             Name =             Net_Evap       Opr Type =  25   Destination = NA            Status =
On

                                            Plan Uses
Plan        River         Year  Mo  Initial Supply
=====================================================================================================================
===============================
ID          ID                      Storage Total   Use 1   Use 2   Use 3   Use 4   Use 5   Use 6   Use 7   Use 8
Use 9  Use 10  Use 11  Use 12  Use 13  Use 14  Use 15  Use 16  Use 17  Use 18  Use 19

   Plan Uses      Ending
=============== =========
Use 20   Total   Storage
Res_Pln      Res_Pln      1979  OCT    25.0   393.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   393.9
Res_Pln      Res_Pln      1979  NOV   393.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   393.9
Res_Pln      Res_Pln      1979  DEC   393.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   393.9
Res_Pln      Res_Pln      1980  JAN   393.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   393.9
Res_Pln      Res_Pln      1980  FEB   393.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   393.9
Res_Pln      Res_Pln      1980  MAR   393.9     0.0     0.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.2   393.7
Res_Pln      Res_Pln      1980  APR   393.7   357.0     4.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     4.9   745.9
Res_Pln      Res_Pln      1980  MAY   745.9   368.9     6.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     6.1  1108.7
Res_Pln      Res_Pln      1980  JUN  1108.7   357.0    19.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    19.0  1446.7
Res_Pln      Res_Pln      1980  JUL  1446.7   368.9    13.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    13.6  1802.0
Res_Pln      Res_Pln      1980  AUG  1802.0   368.9    13.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    13.0  2157.9
Res_Pln      Res_Pln      1980  SEP  2157.9   357.0    12.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    12.6  2502.3
____________ ____________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
Res_Pln      Res_Pln      1980  TOT  2157.9  2571.8    69.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0    69.5  2502.3

Plan Summary    ACFT
Plan Number    =     3
Plan Type      =     1 T&C_Requirement
Plan ID        = T&CPln_1
Plan Name      = T&C_Plan
Plan Source    = Pln_1

Src   1   ID = In_Priority    Name = In_Priority_Present        Opr Type =  -1   Source = In_Priority    Status =  On

                                                     Plan Sources
Plan        River         Year  Mo  From    Plan
=====================================================================================================================
======================
ID          ID                      Exc/Byp Demand Src 1   Src 2   Src 3   Src 4   Src 5   Src 6   Src 7   Src 8   Src
9  Src 10  Src 11  Src 12  Src 13  Src 14  Src 15  Src 16  Src 17  Src 18
```

```
    Plan Sources               ReDivert                         Performance
============================ ============================== ========================
Src 19  Src 20  Short  Total Store 1 Store 2 Store 3   Total  Switch  Status   Total
T&CPln_1     T&CPln_1     1979  OCT      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
T&CPln_1     T&CPln_1     1979  NOV      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
T&CPln_1     T&CPln_1     1979  DEC      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
T&CPln_1     T&CPln_1     1980  JAN      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
T&CPln_1     T&CPln_1     1980  FEB      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
T&CPln_1     T&CPln_1     1980  MAR      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
T&CPln_1     T&CPln_1     1980  APR      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
T&CPln_1     T&CPln_1     1980  MAY      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
T&CPln_1     T&CPln_1     1980  JUN      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
T&CPln_1     T&CPln_1     1980  JUL      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
T&CPln_1     T&CPln_1     1980  AUG      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
T&CPln_1     T&CPln_1     1980  SEP      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0
____________ ____________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______
T&CPln_1     T&CPln_1     1980  TOT      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0      0.0
0.0      0.0      0.0      Off      Off      0.0

#
# ________________________________________________________________________________
# *.xop       Operational Right Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex12.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 12:12: 6
# Time Step:         Monthly
#
# ________________________________________________________________________________

 Operational Right Summary  ACFT

 ID = Opr_1                Name = Opr_Pro_Rata_Direct_to_A Opr Type =   25   Admin # =          6.00001
 Source 1 = Dem_2_WR_1     Destination = Res_1              Year On =    0   Year Off =  9999
YEAR    OCT      NOV      DEC      JAN      FEB      MAR      APR      MAY      JUN      JUL      AUG      SEP      TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980   368.9      0.0      0.0      0.0      0.0      0.0    357.0    368.9    357.0    368.9    368.9    357.0   2546.8
AVG    368.9      0.0      0.0      0.0      0.0      0.0    357.0    368.9    357.0    368.9    368.9    357.0   2546.8
```

---

cdssnews@state.co.us

Last updated: 2012

Example 13

```
# Exhibit 13.1
# *.rsp; response file for Statemod Example 13
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                       Name
# ______________________________________    _____________________________
Control                                    = ex13.ctl
River_Network                              = ex13.rin
StreamGage_Station                         = ..\ex1\ex1.ris
Stream_Base_Monthly                        = ..\ex1\ex1.rim
Diversion_Station                          = ex13.dds
Diversion_Right                            = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                   = ..\ex1\ex1.ddm
Reservoir_Station                          = ..\ex2\ex2.res
Reservoir_Right                            = ..\ex2\ex2.rer
Reservoir_Target_Monthly                   = ..\ex2\ex2.tam
Evaporation_Monthly                        = ..\ex2\ex2.eva
Instreamflow_Station                       = ..\ex1\ex1.ifs
Instreamflow_Right                         = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly         = ..\ex1\ex1.ifa
Plan_Data                                  = ex13.pln
Plan_Return                                = ..\ex11\ex11.prf
Operational_Right                          = ex13.opr
DelayTable_Monthly                         = ..\ex1\ex1.urm
OutputRequest                              = ex13.out

# Exhibit 13.2
# ex*.ctl;  Control file for StateMod Example 13
#
#
  STATEMOD
  StateMod Operating Rule Example - ex13.*
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;    ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;      ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       1     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       6     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       1     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       0     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       0     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       1     : isig    Number of significant digits behind decimal point in output files

# Exhibit 13.4
# *.dds;  Direct Diversion Station file for StateMod Example 13
#
#>************************************************
```

```
#>  Direct Diversion Station File
#>
#>  Card 1 format (a12, a24, a12, i8, f8.2, 2i8, 1x, a12)
#>
#>  ID          cdivid:  Diversion station ID
#>  Name        divnam:  Diversion name
#>  Riv ID       cgoto:  River node for diversion
#>  On/Off      idivsw:  Switch 0=off, 1=on
#>  Capacity    divcap:  Diversion capacity (CFS)
#>                dumx:  Not currently used
#>  RepType    ireptyp:  Replacement reservoir option (see StateMod doc)
#>  Daily ID   cdividy:  Daily diversion ID
#>
#>  Card 2 format (12x, a24, 12x, 2i8, f8.2, f8.0, 2i8)
#>
#>  User Name  usernam:  User name.
#>  DemType     idvcom:  Demand data type switch (see StateMod doc)
#>  #-Ret         nrtn:  Number of return flow table ref
#>  Eff         divefc:  Annual system efficiency
#>  Area          area:  Irrigated acreage
#>  UseType     irturn:  Use type (see StateMod doc)
#>  Demsrc      demsrc:  Demand source (see StateMod doc)
#>
#>  Card 3 format (free format)
#>
#>     diveff (12):  System efficiency % by month
#>
#>  Card 4 format (36x, a12, f8.2, i8)
#>
#>  Ret ID      crtnid:  River node receiving return flow
#>  Ret %       pcttot:  Percent of return flow to this river node
#>  Table #     irtndl:  Delay (return flow) table for this return flow.
#>
#> ID               Name             Riv ID     On/Off  Capacity        RepType   Daily ID
#>---------eb----------------------eb----------eb------eb------eb------eb------exb----------e
#>              User Name                       DemType   #-Ret   Eff %   Area  UseType DemSrc
#>xxxxxxxxxxb----------------------exxxxxxxxxxxxb------eb------eb------eb------eb------eb------e
#>          ... Monthly Efficiencies...
#>b----------------------------------------------------------------------------e
#>                                  Ret ID       Ret % Table #
#>xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxb----------eb------eb------e
Dem_3       Irrigation Demand _3    Dem_3              1 5000.00       1       0  Dem_3
                                                       1       1     50.    0.00       1       0
                                    Dem_4        100.00       1
Dem_4       Irrigation Demand _4    Dem_4              1 5000.00       1       0  Dem_4
                                                       1       1     50.    0.00       1       0
                                    T&CPln_1     100.00       1
Dem_5       Irrigation Demand _5    Dem_5              1 5000.00       1       0  Dem_5
                                                       1       1     50.    0.00       1       0
                                    Dem_2        100.00       1
Dem_2       Irrigation Demand _2    Dem_2              1 5000.00       1       0  Dem_2
                                                       1       1     50.    0.00       1       0
                                    Dem_1        100.00       1
Dem_1       Municipal Demand _1     Dem_1              1 5000.00       1       0  Dem_1
                                                       1       1     20.    0.00       1       00
                                    WWTP_Pln     100.00       2

# Exhibit 13.5
# ex*.pln;  Plan file for StateMod Example 13
#
# ********************************************************
#     Card 1   Control
#     format:  (a12, a24, a12, 5i8)
#
#     Plan ID:              Pid     Include _ instead of blanks
#     Plan Name:            Pname   Include _ instead of blanks
#     Plan Location         iPsta   River node where the plan is located
#     Plan On/Off:          Pon     On (1) or Off (0) switch
#
#     Plan Type             iPlnTyp  1 = Terms and Conditions (T&C)
#                                    2 = Well Augmentation
#                                    3 = Reservoir Reuse
#                                    4 = Non Reservoir Reuse (e.g., WWTP)
#                                    5 = Reuse to a Reservoir from Tmtn
#                                    6 = Reuse to a Diversion from Tmtn
#                                    7 = Transmountain import
#                                    8 = Recharge Plan
#                                    9 = Out-of-Priority Diversion or Storage
#                                   10 = Special Well Augmentation (e.g., Designated Basin, Coffin Wells, etc.)
#                                   11 = Accounting Plan (e.g., changed water rights)
#                                   12 = Release Limit Plan (e.g., HUP Pool Release Limit)
#
#     Plan Efficiency (%)   Peff    Enter 0 if not used
#                                   Enter 1 to read 12 plan efficiency values (%)
#                                   Enter -1 if data is provided in an Operating Rule file (*.opr)
#                                   Enter 999 to use the source structure's efficiency
#     Plan Return Flow ID   iPrf    Enter 0 if not used
#                                   Enter 1 if data is provided in an Plan Return Flow file (*.prf)
#                                   Enter 999 to use the source structure's return flow pattern
```

```
#     Plan Failure Switch   iPfail  Used only for a T&C Plan (iPlntype = 1)
#                                   Enter 0 to not turn plan off if it fails
#                                   Enter 1 to turn a plan off if it fails
#                                   1 = Do stop and accumulate failures to be paid in subsequent time steps
#     Plan Initial Storage  Psto1   Storage in Plan structure at beginning of simulation
#                                   0 for non-Reuse Reservoir plans (iPtype<>3)
#                                   >= 0 for Reuse Reservoir plans (iPtype=3) - set equal to storage in associated
reservoir (*.res) account
#     Plan Source           Psource Source ID of the structure where plan water becomes available
#                                   Note this information is currently used only when the plan type is
#                                   recharge (type 8) from a reservoir
#     Plan Account          iPAcc   Source Account of the structure where plan water becomes available
#                                   Note this information is currently used only when the plan type is
#                                   recharge (type 8) from a reservoir
#
#
# ID        Name                    RiverLoc      ON/Off  iPtype    Peff    iPrf  iPfail   Psto1 Psource     IPAcc
#----------eb----------------------eb----------eb------eb------eb------eb------eb------exb----------eb------e
Pln_1       AccountingPlan          Pln_1            1      11       0       0       0       0 Dem_2         0
Res_Pln     ReservoirAcctingPln     Res_Pln          1       3       0       0       0      25 Res_1         0
T&CPln_1    T&C_Plan                T&CPln_1         1       1      -1       1       0       0 Pln_1         0
WWTP_Pln    ReusableEffluentPln     WWTP_Pln         1       4       0       0       0       0 Dem_1         0

# Exhibit 13.6
# *.opr; operating rules file for Statemod Example 13
#      This file lists the operating rules used in model simulation
#
#
#                  GUIDE TO COLUMN ENTRIES
#     ========================================
#          ID           ID number of operating rule that is used to separate operating rule output in *.xop file
#          Name       Name of operating rule - used for descriptive purposes only
#          Admin#     Administration number used to determine priority of operational water rights relative to other
operations and direct diversion, reservoir, instream flow, and well rights (see tabulation in *.xwr file)
#          # Str      Number of carrier structures, monthly on/off switches, or monthly volumetrics (flag telling
StateMod program the number of entries on next line)
#          On/Off     1 for ON and 0 for OFF
#          Dest ID    Destination of operating rule whose demand is to be met by simulating the operating rule
#          Dest Ac    Account at destination to be met by operating rule - typically 1 for a diversion structure and
account number for reservoir destination
#          Sou1 ID    ID number of primary source of water under which water right is being diverted in operating rule
- typically a water right, reservoir, or Plan structure
#          Sou1 Ac    Account of Sou1 - typically 1 for a diversion structure and account number for reservoir source
#          Sou2 ID    ID of Plan where reusable storage water or reusable ditch credits or terms and conditions
obligations is accounted
#          Sou2 Ac    Percentage of Plan supplies available for operation
#          Type       Rule type corresponding with definitions in Chapter 4 of StateMod documentation
#          ReusePlan  ID of Plan where reusable return flows or diversions to storage are accounted
#          Div Type   'Diversion' indicates pro-rata diversion of source water right priority or exchange of reusable
credits to Dest1
#                        'Depletion' indicates pro-rata diversion of source water right priority consumptive use or
augmentation of upstream diversions at Dest1
#          OprLoss    Percentage of simulated diversion lost in carrier ditch (only applies to certain rules - see
StateMod documentation, Section 4.13)
#          Limit      Capacity limit for carrier structures different from capacity in .dds file (used to represent
constricted conveyance capacity for winter deliveries to reservoirs)
#          Comments   Description of rule type
#
# ID        Name                    NA                    Admin#   # Str  On/Off Dest Id     Dest Ac  Sou1 Id     Sou1
Ac  Sou2 Id     Sou2 Ac     Type ReusePlan    Div Type      OprLoss   Limit Comments
# ---------eb----------------------eb----------exxxxb----------eb------eb------e-b----------eb------e-b----------eb---
---e-b----------eb------eb------exb----------exb----------exb------eb------exb----------
Opr_1       Opr_Direct_Flow_With_Reuse                   1.99999      0.       1 Dem_1              1 Dem_1_WR_1
100 NA                0      25 WWTP_Pln     Diversion           0       0       0    9999 Direct Flow Diversion of
Pro-Rata Water Right
     5000.   5000.   5000.   5000.   5000.   5000.   5000.   5000.   5000.   5000.   5000.   5000.  60000.0
Opr_2       Opr_WWTPPlan_Spill                       99999.00000      0.       1 NA                 0 WWTP_Pln
0 NA                0      29 NA           NA                  0       0       0    9999 Spill WWTP_Plan

# Exhibit 13.7
# *.out; Output request file for StateMod Example 13
#
# Type (e.g. Diversion, StreamGage, Reservoir, InstreamFlow, Well or All)
#
All
#
# Parameter (e.g. Total_Supply, Sim_EOM, River_Outflow or All)
#
All
#
# ID Name Type and Print Code (0=no, 1=yes);
# Note: id = All prints all
#       id = -999 = stop
#       default is to turn on all stream gages (FLO)
#
All
Dem_3       Exist. Diver. 3/Inflow     DIV     1
Res_1       Exist. Reservoir           RES     1
Res_Pln     Reservoir Plan             OTH     1
```

```
Dem_4       Exist. Diver. 4           DIV     1
Dem_5       Exist. Diver. 5/Inflow    DIV     1
Pln_1       Plan Structure            OTH     1
Dem_2       Exist. Diver. 2           DIV     1
T&CPln_1    T&C Plan                  OTH     1
Dem_1       Exist. Diver. 1           DIV     1
WWTP_Pln    ReusableEffluentPlan      OTH     1
ISF         Top Instream Flow         ISF     1
ISF.01      Bottom Instream Flow      ISF     1
-999

#
# _________________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex13.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:           9/24/ 8 10:25:14
# Time Step:         Monthly
#
# _________________________________________________________________________________

                               Water Budget  ACFT


               Stream                    From/To      From       From       Total                  From River
Well    Reservoir  Reservoir    Stream   Reservoir            To       SoilM
Year   Mo       Inflow      Return     GWStorage     SoilM       Plan       Inflow     Divert       by Well
Depletion  Evaporation    Seepage   Outflow      Change        SoilM       Change

 Total
Outflow         Delta         CU        Loss      Pumping       Salvage
======== ============== ========== =========== ============= ============
1979 OCT       4000.0       666.7         0.0         0.0       640.0      5306.7      4666.7         0.0         0.0
0.0         0.0       640.0         0.0         0.0         0.0      5306.7         0.0      1733.3         0.0
0.0         0.0
 1979 NOV       4000.0      1555.6         0.0         0.0      1120.0      6675.6      5555.6         0.0         0.0
0.0         0.0      1120.0         0.0         0.0         0.0      6675.6         0.0      2177.8         0.0
0.0         0.0
 1979 DEC       4000.0      1851.9         0.0         0.0      1440.0      7291.9      5851.9         0.0         0.0
0.0         0.0      1440.0         0.0         0.0         0.0      7291.9         0.0      2325.9         0.0
0.0         0.0
 1980 JAN       4000.0      1950.6         0.0         0.0      1600.0      7550.6      5950.6         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7550.6         0.0      2375.3         0.0
0.0         0.0
 1980 FEB       4000.0      1983.5         0.0         0.0      1600.0      7583.5      5983.5         0.0         0.0
0.0         0.0      1600.0         0.0         0.0         0.0      7583.5         0.0      2391.8         0.0
0.0         0.0
 1980 MAR       4000.0      1994.5         0.0         0.0      1600.0      7594.5      5994.5         0.0         0.0
25.3         0.0      1600.0       -25.3         0.0         0.0      7594.5         0.0      2422.5         0.0
0.0         0.0
 1980 APR       4000.0      1998.2         0.0         0.0      1600.0      7598.2      5998.2         0.0         0.0
328.4         0.0      1600.0      -328.4         0.0         0.0      7598.2         0.0      2727.5         0.0
0.0         0.0
 1980 MAY      20000.0      2124.5         0.0         0.0      1600.0     23724.5      6500.0         0.0         0.0
298.5         0.0      5627.5     11298.5         0.0         0.0     23724.5         0.0      2948.5         0.0
0.0         0.0
 1980 JUN      20000.0      2250.0         0.0         0.0      1600.0     23850.0      6500.0         0.0         0.0
801.2         0.0      5497.6     11051.2         0.0         0.0     23850.0         0.0      3451.2         0.0
0.0         0.0
 1980 JUL       4000.0      2125.0         0.0         0.0      1600.0      7725.0      6000.0         0.0         0.0
485.2         0.0      1725.0      -485.2         0.0         0.0      7725.0         0.0      2885.2         0.0
0.0         0.0
 1980 AUG       4000.0      2000.0         0.0         0.0      1600.0      7600.0      6000.0         0.0         0.0
386.5         0.0      1600.0      -386.5         0.0         0.0      7600.0         0.0      2786.5         0.0
0.0         0.0
 1980 SEP       4000.0      2000.0         0.0         0.0      1600.0      7600.0      6000.0         0.0         0.0
321.1         0.0      1600.0      -321.0         0.0         0.0      7600.0         0.0      2721.1         0.0
0.0         0.0
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
 1980 Tot      80000.0     22500.5         0.0         0.0     17600.0    120100.5     71000.9         0.0         0.0
2646.2         0.0     25650.1     20803.3         0.0         0.0    120100.5         0.0     30946.6         0.0
0.0         0.0

                               Water Budget  ACFT

               Stream                  From/To        From        From        Total                From River        Well
Reservoir   Reservoir         Stream   Reservoir          To        SoilM        Total
 Year   Mo       Inflow        Return   GWStorage        SoilM    Plan (5)      Inflow  Divert (6)     by Well   Depletion
Evaporation      Seepage      Outflow      Change         SoilM      Change      Outflow       Delta      CU (1)     Loss
(2) Pumping (3) Salvage (4)
                     (+)         (+)         (+)         (+)         (+)          NA         (-)         (-)         (-)
(-)         (-)         (-)         (-)         (-)         (-)          NA          NA          NA          NA
NA          NA
```

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Ave	OCT	4000.0	666.7	0.0	0.0	640.0	5306.7	4666.7	0.0	0.0	0.0	0.0	640.0	0.0	0.0	0.0	5306.7	0.0	1733.3	0.0	0.0	0.0
Ave	NOV	4000.0	1555.6	0.0	0.0	1120.0	6675.6	5555.6	0.0	0.0	0.0	0.0	1120.0	0.0	0.0	0.0	6675.6	0.0	2177.8	0.0	0.0	0.0
Ave	DEC	4000.0	1851.9	0.0	0.0	1440.0	7291.9	5851.9	0.0	0.0	0.0	0.0	1440.0	0.0	0.0	0.0	7291.9	0.0	2325.9	0.0	0.0	0.0
Ave	JAN	4000.0	1950.6	0.0	0.0	1600.0	7550.6	5950.6	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7550.6	0.0	2375.3	0.0	0.0	0.0
Ave	FEB	4000.0	1983.5	0.0	0.0	1600.0	7583.5	5983.5	0.0	0.0	0.0	0.0	1600.0	0.0	0.0	0.0	7583.5	0.0	2391.8	0.0	0.0	0.0
Ave	MAR	4000.0	1994.5	0.0	0.0	1600.0	7594.5	5994.5	0.0	0.0	25.3	0.0	1600.0	-25.3	0.0	0.0	7594.5	0.0	2422.5	0.0	0.0	0.0
Ave	APR	4000.0	1998.2	0.0	0.0	1600.0	7598.2	5998.2	0.0	0.0	328.4	0.0	1600.0	-328.4	0.0	0.0	7598.2	0.0	2727.5	0.0	0.0	0.0
Ave	MAY	20000.0	2124.5	0.0	0.0	1600.0	23724.5	6500.0	0.0	0.0	298.5	0.0	5627.5	11298.5	0.0	0.0	23724.5	0.0	2948.5	0.0	0.0	0.0
Ave	JUN	20000.0	2250.0	0.0	0.0	1600.0	23850.0	6500.0	0.0	0.0	801.2	0.0	5497.6	11051.2	0.0	0.0	23850.0	0.0	3451.2	0.0	0.0	0.0
Ave	JUL	4000.0	2125.0	0.0	0.0	1600.0	7725.0	6000.0	0.0	0.0	485.2	0.0	1725.0	-485.2	0.0	0.0	7725.0	0.0	2885.2	0.0	0.0	0.0
Ave	AUG	4000.0	2000.0	0.0	0.0	1600.0	7600.0	6000.0	0.0	0.0	386.5	0.0	1600.0	-386.5	0.0	0.0	7600.0	0.0	2786.5	0.0	0.0	0.0
Ave	SEP	4000.0	2000.0	0.0	0.0	1600.0	7600.0	6000.0	0.0	0.0	321.1	0.0	1600.0	-321.0	0.0	0.0	7600.0	0.0	2721.1	0.0	0.0	0.0
Ave	Tot	80000.0	22500.5	0.0	0.0	17600.0	120100.5	71000.9	0.0	0.0	2646.2	0.0	25650.1	20803.3	0.0	0.0	120100.5	0.0	30946.6	0.0	0.0	0.0
								0.0 (6)														
								71000.9														

```
  Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency
           + max (Resevoir Evaporation (Evap), 0.0).
        (2) Loss is not part of the Stream Water Balance.
            It is the portion of a diversion, well pumping
            and reservoir seepage that does not return to
            the stream
        (3) Pumping is not part of the Stream Balance.
            Its impact on the stream is included in the From River by Well and Well Depletion columns
        (4) Salvage is not part of the Stream Water Balance.
            It is the portion of well pumping that does not impact the stream
        (5) From Plan is water from a reuse plan.
        (6) Divert does not include diversions by an
            instream flow or a T&C plan. Also to avoid
            double accounting with reservoir storage it has
            reduced by:
              1       0. af/yr for Diverted to Storage.
              2       0. af/yr for a Diversion Carrier.
              3       0. af/yr for a Reservior Carrier.
              4       0. af/yr for a Plan Carrier.
                      0. af/yr Total

#
# _________________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex13.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:           9/24/ 8 10:25:16
# Time Step:         Monthly
#
# _________________________________________________________________________________
#
# *.xwr; Water Right Information
#       Number of rights =         9
#
```

```
#
________________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
           operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID               Type         Admin #  On/Off  Str ID #1    Str ID #2           Amount Right Name
Str Name #1               Str Name #2
#    (1) (2)               (3)             (4)     (5)  (6)          (7)                    (8) (9)
(10)                       (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

       1 Opr_1             125         1.99999       1  -1           -1                -1.000 x
Opr_Direct_Flow_With_Reu

       2 Dem_1_WR_1          3         2.00000       0  Dem_1        -1               100.000 c M&I Demand _1
Municipal Demand _1
       3 Dem_2_WR_1          3         6.00000       1  Dem_2        -1                60.000 c Irrigation Demand _2
Irrigation Demand _2
       4 Dem_3_WR_1          3         7.00000       1  Dem_3        -1               100.000 c Irrigation Demand _3
Irrigation Demand _3
       5 ISF_WR_1            1         9.00000       1  ISF          -1                65.500 c Instream Flow 1
Instream Demand
       6 Dem_4_WR_1          3        10.00000       1  Dem_4        -1               100.000 c Irrigation Demand _4
Irrigation Demand _4
       7 Res_1_WR_1          2        15.00000       1  Res_1        -1            100000.000 a Reservoir_1
Reservoir_1
       8 Dem_5_WR_1          3        15.00000       1  Dem_5        -1               100.000 c Irrigation Demand _5
Irrigation Demand _5

       9 Opr_2             129     99999.00000       1  -1           -1                -1.000 x Opr_WWTPPlan_Spill
#
#
# ______________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex13.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 13:47:28
# Time Step:         Monthly
#
# ______________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex13.*
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.
```

```
Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
==================================== ========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3       1979  OCT  1000.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  1000.0   500.0     0.0     0.0     0.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
0.0     0.0  1000.0     0.0 Dem_1           100.000
Dem_3       Dem_3       1979  NOV  1000.0   500.0   555.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   555.6   444.4   222.2   277.8     0.0   277.8     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
555.6     0.0   444.4     0.0 Dem_1           100.000
Dem_3       Dem_3       1979  DEC  1000.0   500.0   851.9     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   851.9   148.1    74.1   425.9     0.0   425.9     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
851.9     0.0   148.1     0.0 Dem_1           100.000
Dem_3       Dem_3       1980  JAN  1000.0   500.0   950.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   950.6    49.4    24.7   475.3     0.0   475.3     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
950.6     0.0    49.4     0.0 Dem_1           100.000
Dem_3       Dem_3       1980  FEB  1000.0   500.0   983.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   983.5    16.5     8.2   491.8     0.0   491.8     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
983.5     0.0    16.5     0.0 ISF.01           -1.000
Dem_3       Dem_3       1980  MAR  1000.0   500.0   994.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   994.5     5.5     2.7   497.3     0.0   497.3     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
994.5     0.0     5.5     0.0 Dem_1           100.000
Dem_3       Dem_3       1980  APR  1000.0   500.0   998.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   998.2     1.8     0.9   499.1     0.0   499.1     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
998.2     0.0     1.8     0.0 Dem_1           100.000
Dem_3       Dem_3       1980  MAY  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1600.0 NA                -1.000
Dem_3       Dem_3       1980  JUN  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  5000.0     0.0     0.0     0.0  5000.0
1000.0     0.0  4000.0  1600.0 NA                -1.000
Dem_3       Dem_3       1980  JUL  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3       1980  AUG  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_3       Dem_3       1980  SEP  1000.0   500.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0     0.0     0.0   500.0     0.0   500.0     0.0     0.0  1000.0     0.0     0.0     0.0  1000.0
1000.0     0.0     0.0     0.0 Dem_1           100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_3       Dem_3       1980  TOT 12000.0  6000.0 10334.2     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 10334.2  1665.8   832.9  5167.1     0.0  5167.1     0.0     0.0 20000.0     0.0     0.0     0.0 20000.0
10334.2     0.0  9665.8  3200.0 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex13.*
PAGE NO.   2

    STRUCTURE ID (0 = total)  : Dem_4              2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4        Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4        Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
```

```
===================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_4       Dem_4       1979  OCT   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0  1000.0     0.0     0.0     0.0     0.0  1000.0
0.0     0.0  1000.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1979  NOV   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   444.4     0.0   138.9     0.0     0.0   583.3
0.0     0.0   583.3     0.0 Dem_1           100.000
Dem_4       Dem_4       1979  DEC   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0   148.1     0.0   351.9     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  JAN   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    49.4     0.0   450.6     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  FEB   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0    16.5     0.0   483.5     0.0     0.0   500.0
0.0     0.0   500.0     0.0 ISF.01           -1.000
Dem_4       Dem_4       1980  MAR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     5.5     0.0   494.5     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  APR   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     1.8     0.0   498.2     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  MAY   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   499.5     0.0     0.0  4499.5
500.0     0.0  3999.5  1600.0 NA               -1.000
Dem_4       Dem_4       1980  JUN   500.0   250.0   500.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   500.0     0.0     0.0   250.0     0.0   250.0     0.0  4000.0     0.0   500.0     0.0     0.0  4500.0
500.0     0.0  4000.0  1600.0 NA               -1.000
Dem_4       Dem_4       1980  JUL   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0   125.0 ISF             100.000
Dem_4       Dem_4       1980  AUG   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0   500.0   250.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
Dem_4       Dem_4       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 Dem_1           100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_4       Dem_4       1980  TOT  5500.0  2750.0  1000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  1000.0  4500.0  2250.0   500.0     0.0   500.0     0.0  9665.8     0.0  4917.1     0.0     0.0 14582.9
1000.0     0.0 13582.9  3325.0 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex13.*
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    STRUCTURE ID (0 = total)  : Dem_5              -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                         Demand             From River By                 From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total          Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
===================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_1           100.000
Dem_5       Dem_5       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
```

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Dem_5       Dem_5       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0   403.0 ISF             100.000
Dem_5       Dem_5       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0   147.6 ISF             100.000
Dem_5       Dem_5       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
Dem_5       Dem_5       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 Dem_2            60.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_5       Dem_5       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0   550.5 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex13.*
PAGE NO.   4

    STRUCTURE ID (0 = total)  : Pln_1           10001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : 694694694694694694694694694694694694694694694694694694694694694694694694694694694
    RIVER LOCATION - FROM     : Pln_1        Plan Structure
    RIVER LOCATION - TO       : Pln_1        Plan Structure



Shortage                 Water Use
                                        Demand              From River By                       From Carrier By
Carried                ============== ===============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total  Total    CU              To    Total            Upstrm
ID          ID          Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                  Station Balance
====================================== =============================================
Reach   Return Well    From/To River    River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow   Divert By Well Outflow Flow  Location Right
Pln_1       Pln_1       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0   403.0 NA               -1.000
Pln_1       Pln_1       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
0.0     0.0 15000.0   147.6 NA               -1.000
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Pln_1       Pln_1       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
Pln_1       Pln_1       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
0.0     0.0  3000.0     0.0 NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Pln_1       Pln_1       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
0.0     0.0 60000.0   550.5 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex13.*
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    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2        Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2        Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1      5000.   297525.   307442.
      Diversion Rights        :     1        60.     3570.     3689.
      Well Capacity           :     1         0.        0.        0.
      Well Rights             :     0         0.        0.        0.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    ====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
=================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2       1979  OCT  3000.0  1500.0  2666.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2666.7   333.3   166.7  1333.3     0.0  1333.3     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
2666.7     0.0   333.3     0.0 Dem_1          100.000
Dem_2       Dem_2       1979  NOV  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1979  DEC  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  JAN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  FEB  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  MAR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  APR  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  MAY  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0   403.0 NA                -1.000
Dem_2       Dem_2       1980  JUN  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0 15000.0     0.0     0.0     0.0     0.0 15000.0
3000.0     0.0 12000.0   147.6 NA                -1.000
Dem_2       Dem_2       1980  JUL  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  AUG  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
Dem_2       Dem_2       1980  SEP  3000.0  1500.0  3000.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3000.0     0.0     0.0  1500.0     0.0  1500.0     0.0  3000.0     0.0     0.0     0.0     0.0  3000.0
3000.0     0.0     0.0     0.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
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Dem_2       Dem_2        1980  TOT 36000.0 18000.0 35666.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 35666.7   333.3   166.7 17833.3     0.0 17833.3     0.0 60000.0     0.0     0.0     0.0     0.0 60000.0
35666.7     0.0 24333.3   550.5 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex13.*
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    STRUCTURE ID (0 = total)  : Res_1            7501
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Reservoir_1
    RIVER LOCATION - FROM     : Res_1        Exist. Reservoir
    RIVER LOCATION - TO       : Res_1        Exist. Reservoir


    STRUCTURE DATA            :     #        af
                                 _____ _________
      Capacity                :     1   100000.
      Reservoir Rights        :     1   100000.



Shortage                 Water Use
                                            Demand              From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    ====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
===================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Res_1       Res_1        1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   333.3     0.0     0.0     0.0     0.0   333.3
0.0     0.0   333.3     0.0 Dem_1            100.000
Res_1       Res_1        1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_1       Res_1        1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_1       Res_1        1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_1       Res_1        1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_1       Res_1        1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_1       Res_1        1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_1       Res_1        1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0     0.0     0.0 12000.0
11597.0     0.0   403.0   403.0 ISF              100.000
Res_1       Res_1        1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 12000.0     0.0     0.0     0.0     0.0 12000.0
11852.4     0.0   147.6   147.6 ISF              100.000
Res_1       Res_1        1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_1       Res_1        1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_1       Res_1        1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Res_1       Res_1        1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 24333.3     0.0     0.0     0.0     0.0 24333.3
23449.5     0.0   883.9   550.5 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex13.*
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    STRUCTURE ID (0 = total)  : Res_Pln         10002
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : 696696696696696696696696696696696696696696696696696696696696696696696696
    RIVER LOCATION - FROM     : Res_Pln      Reservoir Plan
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    RIVER LOCATION - TO       : Res_Pln      Reservoir Plan


Shortage                 Water Use
                                        Demand             From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                   ============= ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                 Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Res_Pln     Res_Pln     1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   333.3     0.0     0.0     0.0     0.0   333.3
0.0     0.0   333.3     0.0 NA                -1.000
Res_Pln     Res_Pln     1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_Pln     Res_Pln     1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_Pln     Res_Pln     1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_Pln     Res_Pln     1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_Pln     Res_Pln     1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_Pln     Res_Pln     1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_Pln     Res_Pln     1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   403.0     0.0     0.0     0.0     0.0   403.0
0.0     0.0   403.0   403.0 NA                -1.000
Res_Pln     Res_Pln     1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   147.6     0.0     0.0     0.0     0.0   147.6
0.0     0.0   147.6   147.6 NA                -1.000
Res_Pln     Res_Pln     1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_Pln     Res_Pln     1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
Res_Pln     Res_Pln     1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Res_Pln     Res_Pln     1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   883.9     0.0     0.0     0.0     0.0   883.9
0.0     0.0   883.9   550.5 NA                -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex13.*
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    STRUCTURE ID (0 = total)  : T&CPln_1        10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : 697697697697697697697697697697697697697697697697697697697697697697697697
    RIVER LOCATION - FROM     : T&CPln_1     T&C Plan
    RIVER LOCATION - TO       : T&CPln_1     T&C Plan


Shortage                 Water Use
                                        Demand             From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                   ============= ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                 Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
T&CPln_1    T&CPln_1    1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1333.3     0.0     0.0     0.0     0.0  1333.3
0.0     0.0  1333.3     0.0 NA                -1.000
```

```
T&CPln_1    T&CPln_1     1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   583.3     0.0     0.0     0.0     0.0   583.3
0.0     0.0   583.3     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4402.5     0.0   125.0     0.0     0.0  4527.5
0.0     0.0  4527.5  1600.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4147.6     0.0   250.0     0.0     0.0  4397.6
0.0     0.0  4397.6  1600.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0   125.0     0.0     0.0   625.0
0.0     0.0   625.0   125.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
T&CPln_1    T&CPln_1     1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   500.0     0.0     0.0     0.0     0.0   500.0
0.0     0.0   500.0     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
T&CPln_1    T&CPln_1     1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 14466.7     0.0   500.0     0.0     0.0 14966.7
0.0     0.0 14966.7  3325.0 NA              -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex13.*
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    STRUCTURE ID (0 = total)  : Dem_1              5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                         Demand             From River By                    From Carrier By
Carried                ============== ==============================
Structure   River                    ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  1333.3     0.0   666.7     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1979  NOV  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   583.3     0.0  1416.7     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1979  DEC  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  JAN  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1        1980  FEB  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
```

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Dem_1       Dem_1       1980  MAR  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1       1980  APR  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1       1980  MAY  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4527.5     0.0  1500.0     0.0     0.0  6027.5
2000.0     0.0  4027.5  1600.0 NA              -1.000
Dem_1       Dem_1       1980  JUN  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0  4397.6     0.0  1500.0     0.0     0.0  5897.6
2000.0     0.0  3897.6  1600.0 NA              -1.000
Dem_1       Dem_1       1980  JUL  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   625.0     0.0  1500.0     0.0     0.0  2125.0
2000.0     0.0   125.0   125.0 NA              -1.000
Dem_1       Dem_1       1980  AUG  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
Dem_1       Dem_1       1980  SEP  2000.0   400.0     0.0     0.0  2000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  2000.0     0.0     0.0   400.0     0.0  1600.0     0.0   500.0     0.0  1500.0     0.0     0.0  2000.0
2000.0     0.0     0.0     0.0 NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_1       Dem_1       1980  TOT 24000.0  4800.0     0.0     0.0 24000.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0 24000.0     0.0     0.0  4800.0     0.0 19200.0     0.0 14966.7     0.0 17083.3     0.0     0.0 32050.1
24000.0     0.0  8050.1  3325.0 NA              -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex13.*
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    STRUCTURE ID (0 = total)  : WWTP_Pln        10004
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : 699699699699699699699699699699699699699699699699699699699699699699699699
    RIVER LOCATION - FROM     : WWTP_Pln     ReusableEffluentPlan
    RIVER LOCATION - TO       : WWTP_Pln     ReusableEffluentPlan



Shortage                 Water Use
                                        Demand              From River By                   From Carrier By
Carried                 ============== ===============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU            To    Total           Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
WWTP_Pln    WWTP_Pln    1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
640.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
-640.0     0.0   640.0     0.0 NA              -1.000
WWTP_Pln    WWTP_Pln    1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
1120.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
-1120.0     0.0  1120.0     0.0 NA              -1.000
WWTP_Pln    WWTP_Pln    1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
1440.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
-1440.0     0.0  1440.0     0.0 NA              -1.000
WWTP_Pln    WWTP_Pln    1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
-1600.0     0.0  1600.0     0.0 NA              -1.000
WWTP_Pln    WWTP_Pln    1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
-1600.0     0.0  1600.0     0.0 NA              -1.000
WWTP_Pln    WWTP_Pln    1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
-1600.0     0.0  1600.0     0.0 NA              -1.000
WWTP_Pln    WWTP_Pln    1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
-1600.0     0.0  1600.0     0.0 NA              -1.000
WWTP_Pln    WWTP_Pln    1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5
-1600.0     0.0  5627.5  1600.0 NA              -1.000
WWTP_Pln    WWTP_Pln    1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6
-1600.0     0.0  5497.6  1600.0 NA              -1.000
WWTP_Pln    WWTP_Pln    1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   125.0     0.0     0.0     0.0     0.0   125.0
-1600.0     0.0  1725.0   125.0 NA              -1.000
WWTP_Pln    WWTP_Pln    1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
-1600.0     0.0  1600.0     0.0 NA              -1.000
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WWTP_Pln    WWTP_Pln     1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
-1600.0     0.0  1600.0     0.0 NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ___________ ___________
WWTP_Pln    WWTP_Pln     1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
17600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  8050.1     0.0     0.0     0.0     0.0
8050.1-17600.0     0.0 25650.1  3325.0 NA               -1.000


   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex13.*
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    STRUCTURE ID (0 = total)  : ISF              5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF          Top Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand             From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF          1979  OCT  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0     0.0   640.0     0.0     0.0     0.0     0.0   640.0
0.0     0.0   640.0   640.0 Hgate_Limit       -1.000
ISF         ISF          1979  NOV  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  3897.6     0.0     0.0     0.0     0.0     0.0  1120.0     0.0     0.0     0.0     0.0  1120.0
0.0     0.0  1120.0  1120.0 Hgate_Limit       -1.000
ISF         ISF          1979  DEC  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0     0.0  1440.0     0.0     0.0     0.0     0.0  1440.0
0.0     0.0  1440.0  1440.0 Hgate_Limit       -1.000
ISF         ISF          1980  JAN  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 Hgate_Limit       -1.000
ISF         ISF          1980  FEB  3637.7     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  3637.7     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 ISF.01            -1.000
ISF         ISF          1980  MAR  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 Hgate_Limit       -1.000
ISF         ISF          1980  APR  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  3897.6     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 Hgate_Limit       -1.000
ISF         ISF          1980  MAY  4027.5     0.0  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  4027.5     0.0     0.0     0.0     0.0  4027.5     0.0  5627.5     0.0     0.0     0.0     0.0  5627.5
4027.5     0.0  5627.5  1600.0 NA               -1.000
ISF         ISF          1980  JUN  3897.6     0.0  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  3897.6     0.0     0.0     0.0     0.0  3897.6     0.0  5497.6     0.0     0.0     0.0     0.0  5497.6
3897.6     0.0  5497.6  1600.0 NA               -1.000
ISF         ISF          1980  JUL  4027.5     0.0   125.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0   125.0  3902.5     0.0     0.0     0.0   125.0     0.0  1725.0     0.0     0.0     0.0     0.0  1725.0
125.0     0.0  1725.0  1600.0 Hgate_Limit       -1.000
ISF         ISF          1980  AUG  4027.5     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  4027.5     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 Hgate_Limit       -1.000
ISF         ISF          1980  SEP  3897.6     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0  3897.6     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ___________ ___________
ISF         ISF          1980  TOT 47420.5     0.0  8050.1     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0  8050.1 39370.5     0.0     0.0     0.0  8050.1     0.0 25650.1     0.0     0.0     0.0     0.0 25650.1
8050.1     0.0 25650.1 17600.0 NA               -1.000


   Diversion Summary  ACFT
```

```
     STATEMOD
     StateMod Operating Rule Example - ex13.*
PAGE NO.  12

    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Bottom Instream Flow
    RIVER LOCATION - FROM     : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                 Station Balance
====================================== ==========================================
Reach   Return Well    From/To River    River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01       1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   640.0     0.0     0.0     0.0     0.0   640.0
0.0     0.0   640.0   640.0 NA                -1.000
Baseflow    ISF.01       1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1120.0     0.0     0.0     0.0     0.0  1120.0
0.0     0.0  1120.0  1120.0 NA                -1.000
Baseflow    ISF.01       1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1440.0     0.0     0.0     0.0     0.0  1440.0
0.0     0.0  1440.0  1440.0 NA                -1.000
Baseflow    ISF.01       1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 NA                -1.000
Baseflow    ISF.01       1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 NA                -1.000
Baseflow    ISF.01       1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 NA                -1.000
Baseflow    ISF.01       1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 NA                -1.000
Baseflow    ISF.01       1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5627.5     0.0     0.0     0.0     0.0  5627.5
0.0     0.0  5627.5  1600.0 NA                -1.000
Baseflow    ISF.01       1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  5497.6     0.0     0.0     0.0     0.0  5497.6
0.0     0.0  5497.6  1600.0 NA                -1.000
Baseflow    ISF.01       1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1725.0     0.0     0.0     0.0     0.0  1725.0
0.0     0.0  1725.0  1600.0 NA                -1.000
Baseflow    ISF.01       1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 NA                -1.000
Baseflow    ISF.01       1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0     0.0     0.0     0.0     0.0  1600.0
0.0     0.0  1600.0  1600.0 NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Baseflow    ISF.01       1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 25650.1     0.0     0.0     0.0     0.0 25650.1
0.0     0.0 25650.1 17600.0 NA                -1.000

#
#
# ________________________________________________________________________________
# *.xpl       Plan
#
#   STATEMOD
#   StateMod Operating Rule Example - ex13.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 13:47:28
# Time Step:         Monthly
#
# ________________________________________________________________________________


Plan Summary    ACFT
Plan Number    =     1
Plan Type      =    11 Accounting_Plan
Plan ID        = Pln_1
Plan Name      = AccountingPlan
Plan Source    = Dem_2
```

Plan ID	River ID	Year	Mo	Supply Total	Use 1	Use 2	Use 3	Use 4	Use 5	Use 6	Use 7	Use 8	Use 9	Use 10	Use 11	Use 12	Use 13	Use 14	Use 15	Use 16	Use 17	Use 18	Use 19	Use 20	Plan Uses Total
Pln_1	Pln_1	1979	OCT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1979	NOV	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1979	DEC	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1980	JAN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1980	FEB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1980	MAR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1980	APR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1980	MAY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1980	JUN	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1980	JUL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1980	AUG	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1980	SEP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pln_1	Pln_1	1980	TOT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Plan Summary   ACFT
Plan Number   =   2
Plan Type   =   3 Reuse_Reservoir
Plan ID   = Res_Pln
Plan Name   = ReservoirAcctingPln
Plan Source   = Res_1

Plan ID	River ID	Year	Mo	Initial Storage	Supply Total	Use 1	Use 2	Use 3	Use 4	Use 5	Use 6	Use 7	Use 8	Use 9	Use 10	Use 11	Use 12	Use 13	Use 14	Use 15	Use 16	Use 17	Use 18	Use 19	Use 20	Plan Uses Total	Ending Storage
Res_Pln	Res_Pln	1979	OCT	25.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1979	NOV	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1979	DEC	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1980	JAN	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1980	FEB	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1980	MAR	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1980	APR	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1980	MAY	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1980	JUN	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1980	JUL	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1980	AUG	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1980	SEP	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Res_Pln	Res_Pln	1980	TOT	25.0	25.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.0

```
Plan Summary    ACFT
Plan Number    =     3
Plan Type      =     1 T&C_Requirement
Plan ID        = T&CPln_1
Plan Name      = T&C_Plan
Plan Source    = Pln_1

Src   1   ID = In_Priority    Name = In_Priority_Present        Opr Type =  -1   Source = In_Priority    Status =  On

                                                     Plan Sources
Plan        River         Year  Mo  From    Plan
=====================================================================================================================
=======================
ID          ID                    Exc/Byp Demand Src 1   Src 2   Src 3   Src 4   Src 5   Src 6   Src 7   Src 8   Src
9  Src 10  Src 11  Src 12  Src 13  Src 14  Src 15  Src 16  Src 17  Src 18

   Plan Sources               ReDivert                         Performance
============================ =============================== =======================
Src 19  Src 20  Short  Total Store 1 Store 2 Store 3   Total  Switch  Status   Total
T&CPln_1     T&CPln_1     1979  OCT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1979  NOV     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1979  DEC     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  JAN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  FEB     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  MAR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  APR     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  MAY     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  JUN     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  JUL     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  AUG     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
T&CPln_1     T&CPln_1     1980  SEP     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0
____________ ____________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______
T&CPln_1     T&CPln_1     1980  TOT     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     Off     Off     0.0


Plan Summary    ACFT
Plan Number    =     4
Plan Type      =     4 Reuse_Diversion
Plan ID        = WWTP_Pln
Plan Name      = ReusableEffluentPln
Plan Source    = Dem_1

Use   1   ID = Opr_2          Name = Opr_WWTPPlan_Spill         Opr Type =  29   Destination = NA             Status =
On

                                            Plan Uses
Plan        River         Year  Mo  Supply
=====================================================================================================================
===============================
ID          ID                    Total   Use 1   Use 2   Use 3   Use 4   Use 5   Use 6   Use 7   Use 8   Use 9  Use
10  Use 11  Use 12  Use 13  Use 14  Use 15  Use 16  Use 17  Use 18  Use 19

   Plan Uses
===============
Use 20   Total
WWTP_Pln     WWTP_Pln     1979  OCT   640.0   640.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0   640.0
WWTP_Pln     WWTP_Pln     1979  NOV  1120.0  1120.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1120.0
WWTP_Pln     WWTP_Pln     1979  DEC  1440.0  1440.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1440.0
```

```
WWTP_Pln     WWTP_Pln     1980  JAN  1600.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0
WWTP_Pln     WWTP_Pln     1980  FEB  1600.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0
WWTP_Pln     WWTP_Pln     1980  MAR  1600.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0
WWTP_Pln     WWTP_Pln     1980  APR  1600.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0
WWTP_Pln     WWTP_Pln     1980  MAY  1600.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0
WWTP_Pln     WWTP_Pln     1980  JUN  1600.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0
WWTP_Pln     WWTP_Pln     1980  JUL  1600.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0
WWTP_Pln     WWTP_Pln     1980  AUG  1600.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0
WWTP_Pln     WWTP_Pln     1980  SEP  1600.0  1600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0  1600.0
____________ ____________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
WWTP_Pln     WWTP_Pln     1980  TOT 17600.0 17600.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0
0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0 17600.0
#
#
# ________________________________________________________________________________
# *.xop       Operational Right Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex13.*
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 13:47:28
# Time Step:         Monthly
#
# ________________________________________________________________________________

 Operational Right Summary  ACFT

 ID = Opr_1             Name = Opr_Direct_Flow_With_Reu Opr Type =   25   Admin # =          1.99999
 Source 1 = Dem_1_WR_1   Destination = Dem_1            Year On =     0   Year Off =  9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0 24000.0
AVG   2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0  2000.0 24000.0

 Operational Right Summary  ACFT

 ID = Opr_2             Name = Opr_WWTPPlan_Spill       Opr Type =   29   Admin # =      99999.00000
 Source 1 = WWTP_Pln     Destination = NA               Year On =     0   Year Off =  9999
YEAR    OCT     NOV     DEC     JAN     FEB     MAR     APR     MAY     JUN     JUL     AUG     SEP     TOT
____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
1980   640.0  1120.0  1440.0  1600.0  1600.0  1600.0  1600.0  1600.0  1600.0  1600.0  1600.0  1600.0 17600.0
AVG    640.0  1120.0  1440.0  1600.0  1600.0  1600.0  1600.0  1600.0  1600.0  1600.0  1600.0  1600.0 17600.0
```

Example 14

```
# Exhibit 14.1
# *.rsp; response file for Statemod Example 14
#      This response file lists the StateMod input files necessary for model simulation
#
# Type                                     Name
# ______________________________________  _____________________________
Control                                  = ex14.ctl
River_Network                            = ex14.rin
StreamGage_Station                       = ..\ex1\ex1.ris
Stream_Base_Monthly                      = ..\ex1\ex1.rim
Diversion_Station                        = ..\ex1\ex1.dds
Diversion_Right                          = ..\ex1\ex1.ddr
Diversion_Demand_Monthly                 = ..\ex1\ex1.ddm
Instreamflow_Station                     = ..\ex1\ex1.ifs
Instreamflow_Right                       = ..\ex1\ex1.ifr
Instreamflow_Demand_AverageMonthly       = ..\ex1\ex1.ifa
Well_Station                             = ..\ex7\ex7.wes
Well_Right                               = ..\ex7\ex7.wer
Well_Demand_Monthly                      = ..\ex7\ex7.wem
Well_Historic_Monthly                    = ..\ex7\ex7.weh
DelayTable_Monthly                       = ..\ex7\ex7.urm
OutputRequest                            = ..\ex1\ex1.out
#
# Plan Data
Plan_Data                                = ex14.pln
Plan_Wells                               = ex14.plw
```

```
# Exhibit 14.2
# ex*.ctl;  Control file for StateMod Example 14
#
#
  STATEMOD
  StateMod Operating Rule Example - ex14.* data set
    1980     : iystr   STARTING YEAR OF SIMULATION
    1980     : iyend   ENDING YEAR OF SIMULATION
       2     : iresop  OUTPUT UNIT OPTION. 1 FOR [CFS], 2 FOR [AF], 3 FOR [KAF]
       0     : moneva  TYPE OF EVAP. DATA. 0 FOR VARIANT DATA. 1 FOR CONS. DATA
       1     : ipflo   TYPE OF STREAM INFLOW. 1 FOR TOTAL FLOW. 2 FOR GAINS
       0     : numpre  NO. OF PRECIPITATION STATIONS
       1     : numeva  NO. OF EVAPORATION STATIONS
      -1     : interv  NO. OF TIME INTERVALS IN DELAY TABLE. MAXIMUM=60.
  1.9835     : factor  FACTOR TO CONVERT CFS TO AC-FT/DAY (1.9835)
  1.9835     : rfacto  DIVISOR FOR STREAM FLOW DATA;    ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.9835     : dfacto  DIVISOR FOR DIVERSION DATA;      ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  0          : ffacto  DIVISOR FOR IN-STREAM FLOW DATA; ENTER 0 FOR DATA IN cfs, ENTER 1.9835 FOR DATA IN af/mo
  1.0        : cfacto  FACTOR TO CONVERT RESERVOIR CONTENT TO AC-FT
  1.0        : efacto  FACTOR TO CONVERT EVAPORATION DATA TO FEET
  1.0        : pfacto  FACTOR TO CONVERT PRECIPITATION DATA TO FEET
  WYR        : cyr1    Year type (a5 right justified !!)
       3     : icondem 1=no add; 2=add, 3=total demand in *.ddm
       0     : ichk    detailed output switch  0 = off, 1=print river network, ... (see documetnation)
       0     : ireopx  Re-operation switch (0=re-operate;1=no re-operation)
       1     : ireach  0=no instream reach; 1=yes instream flow reach
       0     : icall   Switch for detailed call data 0 No detailed call data, 1 Yes detailed call data
       0     : ccall   Detailed call water right ID (not used if icall = 0)
       0     : iday    Switch for daily calculations 0 Monthly analysis, 1 Daily analysis
       1     : iwell   Switch for well operations  See section 7.4 for a discussion of the well options.
       0     : gwmaxrc Constant Maximum stream loss (cfs). Only used if iwell = 2
       0     : isjrip  San Juan RIP
       0     : itsfile -1 skip *.tsp, 0=no tsfile, 1=variable n, 10 max n, well area, capaciaty, etc.
       0     : ieffmax -1 skip *.iwr, 0 no *.iwr, 1 yes *.iwr, 2=read but use ave n
       0     : isprink 0=off, 1=Maximum Supply, 2=Mutual Supply
       0     : soild   0=no *.par, 1=yes *.par but not used, n=yes *.par file with n typical soil depth
       0     : isig    Number of significant digits behind decimal point in output files
```

```
# Exhibit 14.3
# *.rin; River node network file for StateMod Example 14
#
```

```
# ******************************************************
#
#
#  Card 1   Control
#  format:  (a12, a24, a12, 1x, a12, 1x, f8.0)
#
#  ID           cstaid:  Station ID
#  Name         stanam:  Station name
#  Downstream   cstadn:  Downstream node ID
#  Comment     comment:  Alternate identifier/comment.
#  GWMax        gwmaxr:  Max recharge limit (cfs) - see iwell in control file.
#
#   ID                 Name          DownStream     Comment    GWMax
#---------eb----------------------eb----------exb----------exb------e
Dem_3       Exist. Diver. 3/Inflow  Dem_4
Wel_3       Exist. Well_3           Dem_3
Dem_4       Exist. Diver. 4         Wel_Pln
Wel_Pln     Well_Augmentation_Plan  Riv_50
Dem_5       Exist. Diver. 5/Inflow  Dem_2
Dem_2       Exist. Diver. 2         Riv_50
Wel_2       Exist. Well_2           Dem_2
Riv_50      Confluence              Dem_1
Dem_1       Exist. Diver. 1         ISF
Wel_1       Exist. Well_1           Dem_1
ISF         Top Instream Flow       ISF.01
ISF.01      Bottom Instream Flow

# Exhibit 14.4
# ex*.pln;  Plan file for StateMod Example 14
#
# ******************************************************
#     Card 1   Control
#     format:  (a12, a24, a12, 5i8)
#
#     Plan ID:              Pid     Include _ instead of blanks
#     Plan Name:            Pname   Include _ instead of blanks
#     Plan Location         iPsta   River node where the plan is located
#     Plan On/Off:          Pon     On (1) or Off (0) switch
#
#     Plan Type             iPlnTyp  1 = Terms and Conditions (T&C)
#                                    2 = Well Augmentation
#                                    3 = Reservoir Reuse
#                                    4 = Non Reservoir Reuse (e.g., WWTP)
#                                    5 = Reuse to a Reservoir from Tmtn
#                                    6 = Reuse to a Diversion from Tmtn
#                                    7 = Transmountain import
#                                    8 = Recharge Plan
#                                    9 = Out-of-Priority Diversion or Storage
#                                   10 = Special Well Augmentation (e.g., Designated Basin, Coffin Wells, etc.)
#                                   11 = Accounting Plan (e.g., changed water rights)
#                                   12 = Release Limit Plan (e.g., HUP Pool Release Limit)
#
#     Plan Efficiency (%)   Peff    Enter 0 if not used
#                                   Enter 1 to read 12 plan efficiency values (%)
#                                   Enter -1 if data is provided in an Operating Rule file (*.opr)
#                                   Enter 999 to use the source structure's efficiency
#     Plan Return Flow ID   iPrf    Enter 0 if not used
#                                   Enter 1 if data is provided in an Plan Return Flow file (*.prf)
#                                   Enter 999 to use the source structure's return flow pattern
#     Plan Failure Switch   iPfail  Used only for a T&C Plan (iPlntype = 1)
#                                   Enter 0 to not turn plan off if it fails
#                                   Enter 1 to turn a plan off if it fails
#                                   1 = Do stop and accumulate failures to be paid in subsequent time steps
#     Plan Initial Storage  Psto1   Storage in Plan structure at beginning of simulation
#                                   0 for non-Reuse Reservoir plans (iPtype<>3)
#                                   >= 0 for Reuse Reservoir plans (iPtype=3) - set equal to storage in associated
reservoir (*.res) account
#     Plan Source           Psource Source ID of the structure where plan water becomes available
#                                   Note this information is currently used only when the plan type is
#                                   recharge (type 8) from a reservoir
#     Plan Account          iPAcc   Source Account of the structure where plan water becomes available
#                                   Note this information is currently used only when the plan type is
#                                   recharge (type 8) from a reservoir
#
#
# ID        Name                    RiverLoc      ON/Off  iPtype    Peff    iPrf  iPfail   Psto1 Psource     IPAcc
#----------eb----------------------eb----------eb------eb------eb------eb------eb------exb----------eb------e
Wel_Pln     Well_Augmentation_Plan  Wel_Pln            1       2       0       0       0       0 NA          0

# Exhibit 14.5
# *.plw;  Well Plan file for StateMod Example 14
# ______________________________________________________
#
# Plan Well File
#
# Generated by SmPlan.f:
#         1. Extracting all wells (structure type 2) tied to a plan
#
# format(free)
```

```
# Plan ID    WellRightID StructureID  Comments
#----------exb----------xb----------exb--------------------------------
#
#
Wel_Pln      Wel_1_Wr#1  Wel_1
Wel_Pln      Wel_2_Wr#1  Wel_2

#
#
# ____________________________________________________________________________
# *.xwb       Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex14.* data set
#
# Statemod Version: 12.29.05 Date = 2008/10/23)
# Run date:          11/ 6/ 8 16:20:58
# Time Step:         Monthly
#
# ____________________________________________________________________________

                              Water Budget  ACFT

                Stream                  From/To       From        From       Total             From River        Well
Reservoir   Reservoir      Stream   Reservoir          To       SoilM       Total
 Year   Mo      Inflow      Return   GWStorage       SoilM    Plan (5)      Inflow  Divert (6)     by Well   Depletion
Evaporation     Seepage     Outflow      Change       SoilM      Change     Outflow       Delta      CU (1)     Loss
(2) Pumping (3) Salvage (4)
                   (+)         (+)         (+)         (+)         (+)          NA         (-)         (-)         (-)
(-)         (-)         (-)         (-)         (-)         (-)         NA          NA          NA          NA
NA          NA
                  ( 1)        ( 2)        ( 3)        ( 4)        ( 5)        ( 6)        ( 7)        ( 8)        ( 9)
(10)        (11)        (12)        (13)        (14)        (15)        (16)        (17)        (18)        (19)
(20)        (21)
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
 1979 OCT       4000.       1752.         77.          0.          0.       5829.       4833.        356.          0.
0.          0.        640.          0.          0.          0.       5829.          0.       2778.        154.
1922.        500.
 1979 NOV       4000.       3381.          0.          0.          0.       7381.       5778.        251.        356.
0.          0.        997.          0.          0.          0.       7381.          0.       2846.        149.
1115.        111.
 1979 DEC       4000.       3742.         77.          0.          0.       7819.       5694.        269.        607.
0.          0.       1250.          0.          0.          0.       7819.          0.       2861.        154.
1229.        153.
 1980 JAN       4000.       3907.          0.          0.          0.       7907.       5544.        288.        875.
0.          0.       1201.          0.          0.          0.       7907.          0.       2861.        154.
1379.        228.
 1980 FEB       4000.       3893.         69.          0.          0.       7962.       5634.        254.        807.
0.          0.       1266.          0.          0.          0.       7962.          0.       2817.        139.
1199.        183.
 1980 MAR       4000.       3893.          0.          0.          0.       7893.       5607.        280.        810.
0.          0.       1195.          0.          0.          0.       7893.          0.       2861.        154.
1315.        197.
 1980 APR       4000.       3902.         74.          0.          0.       7977.       5602.        273.        821.
0.          0.       1280.          0.          0.          0.       7977.          0.       2846.        149.
1290.        199.
 1980 MAY      20000.       4027.        -77.          0.          0.      23951.       6500.        231.        807.
0.          0.      16413.          0.          0.          0.      23951.          0.       3111.        154.
922.          0.
 1980 JUN      20000.       4152.          0.          0.          0.      24152.       6500.        223.        783.
0.          0.      16646.          0.          0.          0.      24152.          0.       3096.        149.
893.          0.
 1980 JUL       4000.       4027.         77.          0.          0.       8104.       5899.        243.        727.
0.          0.       1236.          0.          0.          0.       8104.          0.       2861.        154.
1024.         51.
 1980 AUG       4000.       3907.         77.          0.          0.       7984.       5781.        258.        697.
0.          0.       1248.          0.          0.          0.       7984.          0.       2861.        154.
1141.        109.
 1980 SEP       4000.       3902.          0.          0.          0.       7902.       5745.        255.        724.
0.          0.       1178.          0.          0.          0.       7902.          0.       2846.        149.
1148.        127.
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________
 1980 Tot      80000.      44488.        374.          0.          0.     124862.      69117.       3179.       8014.
0.          0.      44551.          0.          0.          0.     124862.          0.      34646.       1810.
14576.       1858.

                              Water Budget  ACFT

                Stream                  From/To       From        From       Total             From River        Well
Reservoir   Reservoir      Stream   Reservoir          To       SoilM       Total
 Year   Mo      Inflow      Return   GWStorage       SoilM    Plan (5)      Inflow  Divert (6)     by Well   Depletion
Evaporation     Seepage     Outflow      Change       SoilM      Change     Outflow       Delta      CU (1)     Loss
(2) Pumping (3) Salvage (4)
```

		(+)	(+)	(+)	(+)	(+)	NA	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	NA	NA	NA	NA	NA	NA
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
Ave	OCT	4000.	1752.	77.	0.	0.	5829.	4833.	356.	0.	0.	0.	640.	0.	0.	0.	5829.	0.	2778.	154.	1922.	500.
Ave	NOV	4000.	3381.	0.	0.	0.	7381.	5778.	251.	356.	0.	0.	997.	0.	0.	0.	7381.	0.	2846.	149.	1115.	111.
Ave	DEC	4000.	3742.	77.	0.	0.	7819.	5694.	269.	607.	0.	0.	1250.	0.	0.	0.	7819.	0.	2861.	154.	1229.	153.
Ave	JAN	4000.	3907.	0.	0.	0.	7907.	5544.	288.	875.	0.	0.	1201.	0.	0.	0.	7907.	0.	2861.	154.	1379.	228.
Ave	FEB	4000.	3893.	69.	0.	0.	7962.	5634.	254.	807.	0.	0.	1266.	0.	0.	0.	7962.	0.	2817.	139.	1199.	183.
Ave	MAR	4000.	3893.	0.	0.	0.	7893.	5607.	280.	810.	0.	0.	1195.	0.	0.	0.	7893.	0.	2861.	154.	1315.	197.
Ave	APR	4000.	3902.	74.	0.	0.	7977.	5602.	273.	821.	0.	0.	1280.	0.	0.	0.	7977.	0.	2846.	149.	1290.	199.
Ave	MAY	20000.	4027.	-77.	0.	0.	23951.	6500.	231.	807.	0.	0.	16413.	0.	0.	0.	23951.	0.	3111.	154.	922.	0.
Ave	JUN	20000.	4152.	0.	0.	0.	24152.	6500.	223.	783.	0.	0.	16646.	0.	0.	0.	24152.	0.	3096.	149.	893.	0.
Ave	JUL	4000.	4027.	77.	0.	0.	8104.	5899.	243.	727.	0.	0.	1236.	0.	0.	0.	8104.	0.	2861.	154.	1024.	51.
Ave	AUG	4000.	3907.	77.	0.	0.	7984.	5781.	258.	697.	0.	0.	1248.	0.	0.	0.	7984.	0.	2861.	154.	1141.	109.
Ave	SEP	4000.	3902.	0.	0.	0.	7902.	5745.	255.	724.	0.	0.	1178.	0.	0.	0.	7902.	0.	2846.	149.	1148.	127.
Ave	Tot	80000.	44488.	374.	0.	0.	124862.	69117.	3179.	8014.	0.	0.	44551.	0.	0.	0.	124862.	0.	34646.	1810.	14576.	1858.
								0. (6)														
								69117.														

Note: (1) Consumptive Use (CU) = Diversion (Divert) * Efficiency + From Well * Efficiency
+ max (Resevoir Evaporation (Evap), 0.0).

(2) Loss is not part of the Stream Water Balance.
It is the portion of a diversion, well pumping
and reservoir seepage that does not return to
the stream

(3) Pumping is not part of the Stream Balance.
Its impact on the stream is included in the From River by Well and Well Depletion columns

(4) Salvage is not part of the Stream Water Balance.
It is the portion of well pumping that does not impact the stream

(5) From Plan is water from a reuse plan.

(6) Divert does not include diversions by an
instream flow or a T&C plan. Also to avoid
double accounting with reservoir storage it has
reduced by:

```
  1       0. af/yr for Diverted to Storage.
  2       0. af/yr for a Diversion Carrier.
  3       0. af/yr for a Reservior Carrier.
  4       0. af/yr for a Plan Carrier.
          0. af/yr Total
```

```
#
# _______________________________________________________________________________
#
#
# _______________________________________________________________________________
# *.xwr       Water rights list sorted by basin rank
#
#   STATEMOD
#   StateMod Operating Rule Example - ex14.* data set
#
# Statemod Version: 12.29.05 Date = 2008/10/23)
# Run date:          11/ 6/ 8 16:21:25
# Time Step:         Monthly
#
```

```
# ______________________________________________________________________________
#
# *.xwr; Water Right Information
#        Number of rights =         10
#
#
______________________________________________________________________________________________________________________
__
#
#
# Where:
#  1. Rank           = Water right basin rank
#  2. Type           = Water right type
#                   1=Instream,
#                   2=Reservoir,
#                   3=Diversion,
#                   4=Power,
#                   5=Operational,
#                   6=Well,
#  3. Admin #        = Administration Number
#  4. On/Off         = On or Off switch
#     Note: Certain operating rules may cause a structure to
#           be turned off since if it is controlled by an
            operating rule
#                   0=off
#                   1=on
#                  +n=begin in year n
#                  -n=stop in year n
#  5. Str Id #1      = Primary structure for this right
#  6. Str Id #2      = Secondary structure for this right (-1=N/A)#  7. Amount         = Decreed capacity & unit
(c=CFS, a=AF)
#  8. Right Name     = Water right name
#  9. Str Name #1    = Primary structure for this right
# 10. Str Name #2    = Secondary structure for this right (-1=N/A)
#
#
#   Rank ID               Type         Admin #  On/Off  Str ID #1    Str ID #2           Amount Right Name
Str Name #1               Str Name #2
#    (1) (2)               (3)            (4)     (5)  (6)          (7)                  (8) (9)
(10)                       (11)
#_______ _____________ _______ _______________ _______  ____________ ____________   ___________
________________________  ________________________  ________________________

       1 Dem_1_WR_1          3         2.00000       1  Dem_1        -1              100.000 c M&I Demand _1
Municipal Demand _1
       2 Dem_2_WR_1          3         6.00000       1  Dem_2        -1               60.000 c Irrigation Demand _2
Irrigation Demand _2
       3 Dem_3_WR_1          3         7.00000       1  Dem_3        -1              100.000 c Irrigation Demand _3
Irrigation Demand _3
       4 ISF_WR_1            1         9.00000       1  ISF          -1               65.500 c Instream Flow 1
Instream Demand
       5 Dem_4_WR_1          3        10.00000       1  Dem_4        -1              100.000 c Irrigation Demand _4
Irrigation Demand _4
       6 Dem_5_WR_1          3        15.00000       1  Dem_5        -1              100.000 c Irrigation Demand _5
Irrigation Demand _5
       7 Wel_1_Wr#1          6        20.00000       1  Wel_1        -1               10.000 c Wel_1 to Wel_1
Well Structure 1
       8 Wel_2_Wr#1          6        20.00000       1  Wel_2        -1                5.000 c Wel_2 to Wel_2
Well Structure 2
       9 Wel_3_Wr#1          6        20.00000       1  Wel_3        Dem_3            50.000 c Wel_3 to Dem_3
Well_3 to Dem_3           Irrigation Demand _3       6   3
      10 Wel_3_Wr#2          6        20.00000       1  Wel_3        Dem_3             5.000 c Wel_4 to Dem_3
Well_3 to Dem_3           Irrigation Demand _3       6   4
#
#
# ______________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex14.* data set
#
# Statemod Version: 12.29.05 Date = 2008/10/23)
# Run date:          11/ 6/ 8 16:20:47
# Time Step:         Monthly
#
# ______________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex14.* data set
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3              -1
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow
```

```
    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1     5000.   297525.   307442.
      Well Rights             :     2       55.     3273.     3382.


Shortage               Water Use                        Station In/Out                       Station Balance
                                       Demand              From River By                       From Carrier By
Carried               ________________ ______________________________ _______________________________________
_______________________________
                                  _______________ ______________________________     From _______________________
Exchang    From   Total   Total      CU              To   Total          Upstrm   Reach  Return    Well From/To
River   River   River   River   Avail Control          Control
Structure   River              Total      CU Priorty Storage Exc_Pln    Loss    Well Priorty Sto_Exc    Loss
Bypass   SoilM  Supply   Short   Short      CU   SoilM  Return    Loss  Inflow    Gain    Flow Deplete GW Stor  Inflow
Divert by Well Outflow    Flow Location         Right
ID          ID          Year   Mo      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)     (+)     (-)
(+)      NA      NA      NA      NA      NA      NA      NA      NA     (+)     (+)     (+)     (-)     (+)     (+)
(-)     (-)     (+)      NA NA                          NA
                                       ( 1)    ( 2)    ( 3)    ( 4)    ( 5)    ( 6)    ( 7)    ( 8)    ( 9)    (10)
(11)    (12)    (13)    (14)    (15)    (16)    (17)    (18)    (19)    (20)    (21)    (22)    (23)    (24)    (25)
(26)    (27)    (28)    (29) (30)              (31)
___________ ___________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_3       Dem_3       1979  OCT   1000.    500.      0.      0.      0.      0.   1000.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.      0.      0.   1000.
0.    125.    875.      0. Dem_1            100.000
Dem_3       Dem_3       1979  NOV   1000.    500.    778.      0.      0.      0.    222.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    125.      0.    875.
778.     28.     69.      0. NA                -1.000
Dem_3       Dem_3       1979  DEC   1000.    500.    694.      0.      0.      0.    306.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    153.      0.    847.
694.     38.    115.      0. NA                -1.000
Dem_3       Dem_3       1980  JAN   1000.    500.    544.      0.      0.      0.    456.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    191.      0.    809.
544.     57.    208.      0. NA                -1.000
Dem_3       Dem_3       1980  FEB   1000.    500.    634.      0.      0.      0.    366.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    123.      0.    877.
634.     46.    197.      0. NA                -1.000
Dem_3       Dem_3       1980  MAR   1000.    500.    607.      0.      0.      0.    393.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    141.      0.    859.
607.     49.    203.      0. NA                -1.000
Dem_3       Dem_3       1980  APR   1000.    500.    602.      0.      0.      0.    398.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    152.      0.    848.
602.     50.    196.      0. NA                -1.000
Dem_3       Dem_3       1980  MAY   1000.    500.   1000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   5000.      0.    145.      0.   4855.
1000.      0.   3855.   3855. NA                -1.000
Dem_3       Dem_3       1980  JUN   1000.    500.   1000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   5000.      0.     99.      0.   4901.
1000.      0.   3901.   3901. NA                -1.000
Dem_3       Dem_3       1980  JUL   1000.    500.    899.      0.      0.      0.    101.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.     50.      0.    950.
899.     13.     39.      0. NA                -1.000
Dem_3       Dem_3       1980  AUG   1000.    500.    781.      0.      0.      0.    219.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.     13.      0.    987.
781.     27.    179.      0. NA                -1.000
Dem_3       Dem_3       1980  SEP   1000.    500.    745.      0.      0.      0.    255.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.     40.      0.    960.
745.     32.    183.      0. NA                -1.000
___________ ___________ ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_3       Dem_3       1980  TOT  12000.   6000.   8284.      0.      0.      0.   3716.      0.      0.      0.
0.      0.  12000.      0.      0.   6000.      0.   6000.      0.      0.  20000.      0.   1231.      0.  18769.
8284.    464.  10021.   7757. NA                -1.000

# ________________________________________________________________________________
# *.xdd       Diversion Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex7.* data set
#
# Statemod Version: 12.29.00 Date = 2008/09/15)
# Run date:          11/ 2/ 8 14: 8:29
# Time Step:         Monthly
#
# ________________________________________________________________________________

   Diversion Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex7.* data set
PAGE NO.   1

    STRUCTURE ID (0 = total)  : Dem_3             -1
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    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _3
    RIVER LOCATION - FROM     : Dem_3        Exist. Diver. 3/Inflow
    RIVER LOCATION - TO       : Dem_3        Exist. Diver. 3/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1     5000.   297525.   307442.
      Well Rights             :     2       55.     3273.     3382.


Shortage                 Water Use
                                        Demand               From River By                      From Carrier By
Carried                ============== ==============================
Structure   River                   ============== ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
==================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_3       Dem_3       1979  OCT   1000.    500.      0.      0.      0.      0.   1000.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.      0.      0.   1000.
0.    125.    875.      0. Dem_1            100.000
Dem_3       Dem_3       1979  NOV   1000.    500.    778.      0.      0.      0.    222.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    125.      0.    875.
778.     28.     69.      0. NA              -1.000
Dem_3       Dem_3       1979  DEC   1000.    500.    694.      0.      0.      0.    306.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    153.      0.    847.
694.     38.    115.      0. NA              -1.000
Dem_3       Dem_3       1980  JAN   1000.    500.    544.      0.      0.      0.    456.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    191.      0.    809.
544.     57.    208.      0. NA              -1.000
Dem_3       Dem_3       1980  FEB   1000.    500.    634.      0.      0.      0.    366.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    123.      0.    877.
634.     46.    197.      0. NA              -1.000
Dem_3       Dem_3       1980  MAR   1000.    500.    607.      0.      0.      0.    393.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    141.      0.    859.
607.     49.    203.      0. NA              -1.000
Dem_3       Dem_3       1980  APR   1000.    500.    602.      0.      0.      0.    398.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.    152.      0.    848.
602.     50.    196.      0. NA              -1.000
Dem_3       Dem_3       1980  MAY   1000.    500.   1000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   5000.      0.    145.      0.   4855.
1000.      0.   3855.   3855. NA              -1.000
Dem_3       Dem_3       1980  JUN   1000.    500.   1000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   5000.      0.     99.      0.   4901.
1000.      0.   3901.   3901. NA              -1.000
Dem_3       Dem_3       1980  JUL   1000.    500.    899.      0.      0.      0.    101.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.     50.      0.    950.
899.     13.     39.      0. NA              -1.000
Dem_3       Dem_3       1980  AUG   1000.    500.    781.      0.      0.      0.    219.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.     13.      0.    987.
781.     27.    179.      0. NA              -1.000
Dem_3       Dem_3       1980  SEP   1000.    500.    745.      0.      0.      0.    255.      0.      0.      0.
0.      0.   1000.      0.      0.    500.      0.    500.      0.      0.   1000.      0.     40.      0.    960.
745.     32.    183.      0. NA              -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_3       Dem_3       1980  TOT  12000.   6000.   8284.      0.      0.      0.   3716.      0.      0.      0.
0.      0.  12000.      0.      0.   6000.      0.   6000.      0.      0.  20000.      0.   1231.      0.  18769.
8284.    464.  10021.   7757. NA              -1.000


    Gage  Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex7.* data set
PAGE NO.   2

    RIVER LOCATION - FROM     : Wel_3        Exist. Well_3
    RIVER LOCATION - TO       : Wel_3        Exist. Well_3


Shortage                 Water Use
                                        Demand               From River By                      From Carrier By
Carried                ============== ==============================
Structure   River                   ============== ==============================    From    ====================
Exchange  From  Total   Total    CU              To    Total           Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow
```

```
            Station In/Out                              Station Balance
====================================== =============================================
Reach    Return Well    From/To River   River  River   River   Avail Control  Control
 Gain    Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
NA          Wel_3        1979  OCT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1979  NOV      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1979  DEC      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  JAN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  FEB      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  MAR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  APR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  MAY      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  JUN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  JUL      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  AUG      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
NA          Wel_3        1980  SEP      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
___________ __________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
NA          Wel_3        1980  TOT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000


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    STRUCTURE ID (0 = total)  : Dem_4              2
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _4
    RIVER LOCATION - FROM     : Dem_4       Exist. Diver. 4
    RIVER LOCATION - TO       : Dem_4       Exist. Diver. 4


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                           Demand               From River By                   From Carrier By
Carried                 ============== ===============================
Structure   River                  ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                              Station Balance
====================================== =============================================
Reach    Return Well    From/To River   River  River   River   Avail Control  Control
 Gain    Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_4       Dem_4        1979  OCT    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    875.      0.    250.      0.      0.   1125.
0.      0.   1125.      0. Dem_1           100.000
Dem_4       Dem_4        1979  NOV    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.     69.      0.    500.      0.      0.    569.
0.      0.    569.      0. ISF             100.000
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Dem_4       Dem_4       1979  DEC    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    115.      0.    500.      0.      0.    615.
0.      0.    615.      0. ISF             100.000
Dem_4       Dem_4       1980  JAN    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    208.      0.    500.      0.      0.    708.
0.      0.    708.      0. ISF             100.000
Dem_4       Dem_4       1980  FEB    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    197.      0.    500.      0.      0.    697.
0.      0.    697.      0. Dem_1           100.000
Dem_4       Dem_4       1980  MAR    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    203.      0.    500.      0.      0.    703.
0.      0.    703.      0. Dem_1           100.000
Dem_4       Dem_4       1980  APR    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    196.      0.    500.      0.      0.    696.
0.      0.    696.      0. Dem_1           100.000
Dem_4       Dem_4       1980  MAY    500.    250.    500.      0.      0.      0.      0.      0.      0.      0.
0.      0.    500.      0.      0.    250.      0.    250.      0.   3855.      0.    500.      0.      0.   4355.
500.      0.   3855.   3855. NA               -1.000
Dem_4       Dem_4       1980  JUN    500.    250.    500.      0.      0.      0.      0.      0.      0.      0.
0.      0.    500.      0.      0.    250.      0.    250.      0.   3901.      0.    500.      0.      0.   4401.
500.      0.   3901.   3901. NA               -1.000
Dem_4       Dem_4       1980  JUL    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.     39.      0.    500.      0.      0.    539.
0.      0.    539.      0. ISF             100.000
Dem_4       Dem_4       1980  AUG    500.    250.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.    500.    250.      0.      0.      0.      0.    179.      0.    500.      0.      0.    679.
0.      0.    679.      0. Dem_1           100.000
Dem_4       Dem_4       1980  SEP      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    183.      0.    500.      0.      0.    683.
0.      0.    683.      0. ISF             100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_4       Dem_4       1980  TOT   5500.   2750.   1000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1000.   4500.   2250.    500.      0.    500.      0.  10021.      0.   5750.      0.      0.  15771.
1000.      0.  14771.   7757. NA               -1.000


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    STRUCTURE ID (0 = total)  : Dem_5              -3
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _5
    RIVER LOCATION - FROM     : Dem_5        Exist. Diver. 5/Inflow
    RIVER LOCATION - TO       : Dem_5        Exist. Diver. 5/Inflow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                         Demand              From River By                    From Carrier By
Carried                 ============== ==============================
Structure   River                 ============== ==============================    From    =====================
Exchange  From  Total   Total    CU            To    Total           Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                           Station Balance
===================================== =======================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_5       Dem_5       1979  OCT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_1           100.000
Dem_5       Dem_5       1979  NOV      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5       1979  DEC      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5       1980  JAN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5       1980  FEB      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5       1980  MAR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
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Dem_5       Dem_5        1980  APR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5        1980  MAY      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.  15000.      0.      0.      0.  15000.
0.      0.  15000.  12000. NA               -1.000
Dem_5       Dem_5        1980  JUN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.  15000.      0.      0.      0.  15000.
0.      0.  15000.  12000. NA               -1.000
Dem_5       Dem_5        1980  JUL      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5        1980  AUG      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
Dem_5       Dem_5        1980  SEP      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.   3000.      0.      0.      0.   3000.
0.      0.   3000.      0. Dem_2            60.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Dem_5       Dem_5        1980  TOT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.      0.  60000.      0.      0.      0.  60000.
0.      0.  60000.  24000. NA               -1.000


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    STRUCTURE ID (0 = total)  : Dem_2              4
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Irrigation Demand _2
    RIVER LOCATION - FROM     : Dem_2        Exist. Diver. 2
    RIVER LOCATION - TO       : Dem_2        Exist. Diver. 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1       60.     3570.     3689.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.


Shortage                 Water Use
                                        Demand              From River By                   From Carrier By
Carried                ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass      SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                             Station Balance
===================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_2       Dem_2        1979  OCT   3000.   1500.   2833.      0.      0.      0.      0.      0.      0.      0.
0.      0.   2833.    167.     83.   1417.      0.   1417.      0.   3000.      0.      0.      0.      0.   3000.
2833.      0.    167.      0. Dem_1            100.000
Dem_2       Dem_2        1979  NOV   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1979  DEC   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  JAN   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  FEB   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  MAR   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  APR   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
Dem_2       Dem_2        1980  MAY   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.  15000.      0.      0.      0.      0.  15000.
3000.      0.  12000.  12000. NA                -1.000
Dem_2       Dem_2        1980  JUN   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.  15000.      0.      0.      0.      0.  15000.
3000.      0.  12000.  12000. NA                -1.000
Dem_2       Dem_2        1980  JUL   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit       -1.000
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Dem_2       Dem_2       1980  AUG   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit      -1.000
Dem_2       Dem_2       1980  SEP   3000.   1500.   3000.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3000.      0.      0.   1500.      0.   1500.      0.   3000.      0.      0.      0.      0.   3000.
3000.      0.      0.      0. Hgate_Limit      -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_2       Dem_2       1980  TOT  36000.  18000.  35833.      0.      0.      0.      0.      0.      0.      0.
0.      0.  35833.    167.     83.  17917.      0.  17917.      0.  60000.      0.      0.      0.      0.  60000.
35833.      0.  24167.  24000. NA                -1.000


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    STRUCTURE ID (0 = total)  : Wel_2           12502
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Well Structure 2
    RIVER LOCATION - FROM     : Wel_2        Exist. Well_2
    RIVER LOCATION - TO       : Wel_2        Exist. Well_2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Well Capacity           :     1     5000.   297525.   307442.
      Well Rights             :     1        5.      298.      307.



Shortage                 Water Use
                                        Demand              From River By                     From Carrier By
Carried                 ============== ==============================
Structure   River                   ============== ==============================    From    ====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID          Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Wel_2       Wel_2       1979  OCT   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Dem_1             100.000
Wel_2       Wel_2       1979  NOV   1000.    500.      0.      0.      0.      0.    298.      0.      0.      0.
0.      0.    298.    702.    351.    149.      0.    149.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. ISF               100.000
Wel_2       Wel_2       1979  DEC   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. ISF               100.000
Wel_2       Wel_2       1980  JAN   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. ISF               100.000
Wel_2       Wel_2       1980  FEB   1000.    500.      0.      0.      0.      0.    278.      0.      0.      0.
0.      0.    278.    722.    361.    139.      0.    139.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Dem_1             100.000
Wel_2       Wel_2       1980  MAR   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Dem_1             100.000
Wel_2       Wel_2       1980  APR   1000.    500.      0.      0.      0.      0.    298.      0.      0.      0.
0.      0.    298.    702.    351.    149.      0.    149.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Dem_1             100.000
Wel_2       Wel_2       1980  MAY   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit      -1.000
Wel_2       Wel_2       1980  JUN   1000.    500.      0.      0.      0.      0.    298.      0.      0.      0.
0.      0.    298.    702.    351.    149.      0.    149.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit      -1.000
Wel_2       Wel_2       1980  JUL   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. ISF               100.000
Wel_2       Wel_2       1980  AUG   1000.    500.      0.      0.      0.      0.    307.      0.      0.      0.
0.      0.    307.    693.    346.    154.      0.    154.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Dem_1             100.000
Wel_2       Wel_2       1980  SEP   1000.    500.      0.      0.      0.      0.    298.      0.      0.      0.
0.      0.    298.    702.    351.    149.      0.    149.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. ISF               100.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Wel_2       Wel_2       1980  TOT  12000.   6000.      0.      0.      0.      0.   3620.      0.      0.      0.
0.      0.   3620.   8380.   4190.   1810.      0.   1810.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000
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    Gage  Summary  ACFT
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    RIVER LOCATION - FROM     : Riv_50       Confluence
    RIVER LOCATION - TO       : Riv_50       Confluence



Shortage                 Water Use
                                        Demand               From River By                   From Carrier By
Carried                ============== ==============================
Structure   River                  ============= ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID          ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                 Station Balance
==================================== ==========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
NA          Riv_50       1979  OCT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1292.      0.      0.      0.      0.   1292.
0.      0.   1292.      0. NA                -1.000
NA          Riv_50       1979  NOV      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    569.      0.      0.      0.      0.    569.
0.      0.    569.      0. NA                -1.000
NA          Riv_50       1979  DEC      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    615.      0.      0.      0.      0.    615.
0.      0.    615.      0. NA                -1.000
NA          Riv_50       1980  JAN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    708.      0.      0.      0.      0.    708.
0.      0.    708.      0. NA                -1.000
NA          Riv_50       1980  FEB      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    697.      0.      0.      0.      0.    697.
0.      0.    697.      0. NA                -1.000
NA          Riv_50       1980  MAR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    703.      0.      0.      0.      0.    703.
0.      0.    703.      0. NA                -1.000
NA          Riv_50       1980  APR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    696.      0.      0.      0.      0.    696.
0.      0.    696.      0. NA                -1.000
NA          Riv_50       1980  MAY      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.  15855.      0.    125.      0.      0.  15980.
0.      0.  15980.  12386. NA                -1.000
NA          Riv_50       1980  JUN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.  15901.      0.    250.      0.      0.  16151.
0.      0.  16151.  12749. NA                -1.000
NA          Riv_50       1980  JUL      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    539.      0.    125.      0.      0.    664.
0.      0.    664.      0. NA                -1.000
NA          Riv_50       1980  AUG      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    679.      0.      0.      0.      0.    679.
0.      0.    679.      0. NA                -1.000
NA          Riv_50       1980  SEP      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    683.      0.      0.      0.      0.    683.
0.      0.    683.      0. NA                -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
NA          Riv_50       1980  TOT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.  38938.      0.    500.      0.      0.  39438.
0.      0.  39438.  25135. NA                -1.000


   Diversion Summary  ACFT
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    STRUCTURE ID (0 = total)  : Dem_1              5
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Municipal Demand _1
    RIVER LOCATION - FROM     : Dem_1        Exist. Diver. 1
    RIVER LOCATION - TO       : Dem_1        Exist. Diver. 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                _____ _________ _________ _________
      Diversion Capacity      :     1     5000.   297525.   307442.
      Diversion Rights        :     1      100.     5950.     6149.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
```

```
                                        Demand              From River By                   From Carrier By
Carried                  ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                  Station Balance
====================================== ==========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Dem_1       Dem_1        1979  OCT   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.   1292.      0.    785.      0.      0.   2077.
2000.    77.      0.      0. NA               -1.000
Dem_1       Dem_1        1979  NOV   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.    569.      0.   1610.     77.      0.   2102.
2000.    74.     28.      0. NA               -1.000
Dem_1       Dem_1        1979  DEC   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.    615.      0.   1651.    151.      0.   2115.
2000.    77.     38.      0. NA               -1.000
Dem_1       Dem_1        1980  JAN   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.    708.      0.   1654.    228.      0.   2134.
2000.    77.     57.      0. NA               -1.000
Dem_1       Dem_1        1980  FEB   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.    697.      0.   1646.    228.      0.   2115.
2000.    69.     46.      0. NA               -1.000
Dem_1       Dem_1        1980  MAR   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.    703.      0.   1646.    223.      0.   2126.
2000.    77.     49.      0. NA               -1.000
Dem_1       Dem_1        1980  APR   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.    696.      0.   1651.    223.      0.   2124.
2000.    74.     50.      0. NA               -1.000
Dem_1       Dem_1        1980  MAY   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.  15980.      0.   1651.    221.      0.  17411.
2000.    77.  15334.  12386. NA               -1.000
Dem_1       Dem_1        1980  JUN   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.  16151.      0.   1651.    228.      0.  17574.
2000.    74.  15500.  12749. NA               -1.000
Dem_1       Dem_1        1980  JUL   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.    664.      0.   1651.    226.      0.   2090.
2000.    77.     13.      0. NA               -1.000
Dem_1       Dem_1        1980  AUG   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.    679.      0.   1654.    228.      0.   2104.
2000.    77.     27.      0. NA               -1.000
Dem_1       Dem_1        1980  SEP   2000.   400.   2000.     0.      0.      0.      0.      0.      0.      0.
0.      0.   2000.     0.      0.    400.     0.   1600.     0.    683.      0.   1651.    228.      0.   2106.
2000.    74.     32.      0. NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Dem_1       Dem_1        1980  TOT  24000.  4800.  24000.     0.      0.      0.      0.      0.      0.      0.
0.      0.  24000.     0.      0.   4800.     0.  19200.     0.  39438.      0.  18902.   2261.      0.  56079.
24000.   905.  31174.  25135. NA               -1.000


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    STRUCTURE ID (0 = total)  : Wel_1           12501
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Well Structure 1
    RIVER LOCATION - FROM     : Wel_1        Exist. Well_1
    RIVER LOCATION - TO       : Wel_1        Exist. Well_1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Well Capacity           :     1     5000.   297525.   307442.
      Well Rights             :     1       10.      595.      615.



Shortage                 Water Use
                                        Demand              From River By                   From Carrier By
Carried                  ============== ==============================
Structure   River                   ============== ==============================    From    =====================
Exchange  From  Total   Total    CU              To    Total            Upstrm
ID         ID           Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss     Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply  Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                                  Station Balance
====================================== ==========================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Wel_1       Wel_1        1979  OCT   3000.  1500.      0.     0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.     0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
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Wel_1       Wel_1        1979  NOV   3000.   1500.      0.      0.      0.      0.    595.      0.      0.      0.
0.      0.    595.   2405.   1202.    298.      0.    149.    149.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1979  DEC   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  JAN   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  FEB   3000.   1500.      0.      0.      0.      0.    555.      0.      0.      0.
0.      0.    555.   2445.   1222.    278.      0.    139.    139.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  MAR   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  APR   3000.   1500.      0.      0.      0.      0.    595.      0.      0.      0.
0.      0.    595.   2405.   1202.    298.      0.    149.    149.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  MAY   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  JUN   3000.   1500.      0.      0.      0.      0.    595.      0.      0.      0.
0.      0.    595.   2405.   1202.    298.      0.    149.    149.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  JUL   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  AUG   3000.   1500.      0.      0.      0.      0.    615.      0.      0.      0.
0.      0.    615.   2385.   1193.    307.      0.    154.    154.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
Wel_1       Wel_1        1980  SEP   3000.   1500.      0.      0.      0.      0.    595.      0.      0.      0.
0.      0.    595.   2405.   1202.    298.      0.    149.    149.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ____________ ___________
Wel_1       Wel_1        1980  TOT  36000.  18000.      0.      0.      0.      0.   7240.      0.      0.      0.
0.      0.   7240.  28760.  14380.   3620.      0.   1810.   1810.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0. NA                -1.000


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    STRUCTURE ID (0 = total)  : ISF              5001
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Instream Demand
    RIVER LOCATION - FROM     : ISF          Top Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                 _____ _________ _________ _________
      Diversion Capacity      :     1        0.        0.        0.
      Diversion Rights        :     1       66.     3898.     4027.
      Well Capacity           :     1        0.        0.        0.
      Well Rights             :     0        0.        0.        0.



Shortage                 Water Use
                                        Demand             From River By                    From Carrier By
Carried                 ============== ===============================
Structure   River                    ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total            Upstrm
ID         ID            Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                            Station Balance
====================================== ============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
ISF         ISF          1979  OCT   4027.      0.    640.      0.      0.      0.      0.      0.      0.      0.
0.      0.    640.   3387.      0.      0.      0.    640.      0.      0.      0.    717.      0.     77.    794.
640.    154.    640.      0. Hgate_Limit       -1.000
ISF         ISF          1979  NOV   3898.      0.    997.      0.      0.      0.      0.      0.      0.      0.
0.      0.    997.   2901.      0.      0.      0.    997.      0.     28.      0.   1271.    154.      0.   1145.
997.    149.    997.      0. Hgate_Limit       -1.000
ISF         ISF          1979  DEC   4027.      0.   1250.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1250.   2777.      0.      0.      0.   1250.      0.     38.      0.   1591.    302.     77.   1404.
1250.    154.   1250.      0. Hgate_Limit       -1.000
ISF         ISF          1980  JAN   4027.      0.   1201.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1201.   2827.      0.      0.      0.   1201.      0.     57.      0.   1754.    456.      0.   1355.
1201.    154.   1201.      0. Hgate_Limit       -1.000
ISF         ISF          1980  FEB   3638.      0.   1266.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1266.   2371.      0.      0.      0.   1266.      0.     46.      0.   1746.    456.     69.   1405.
1266.    139.   1266.      0. Hgate_Limit       -1.000
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ISF         ISF         1980  MAR   4027.      0.   1195.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1195.   2832.      0.      0.      0.   1195.      0.     49.      0.   1746.    446.      0.   1349.
1195.    154.   1195.      0. Hgate_Limit       -1.000
ISF         ISF         1980  APR   3898.      0.   1280.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1280.   2617.      0.      0.      0.   1280.      0.     50.      0.   1751.    446.     74.   1429.
1280.    149.   1280.      0. Hgate_Limit       -1.000
ISF         ISF         1980  MAY   4027.      0.   4027.      0.      0.      0.      0.      0.      0.      0.
0.      0.   4027.      0.      0.      0.      0.   4027.      0.  15334.      0.   1751.    441.    -77.  16567.
4027.    154.  16413.  12386. NA                -1.000
ISF         ISF         1980  JUN   3898.      0.   3898.      0.      0.      0.      0.      0.      0.      0.
0.      0.   3898.      0.      0.      0.      0.   3898.      0.  15500.      0.   1751.    456.      0.  16795.
3898.    149.  16646.  12749. NA                -1.000
ISF         ISF         1980  JUL   4027.      0.   1236.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1236.   2792.      0.      0.      0.   1236.      0.     13.      0.   1751.    451.     77.   1390.
1236.    154.   1236.      0. Hgate_Limit       -1.000
ISF         ISF         1980  AUG   4027.      0.   1248.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1248.   2780.      0.      0.      0.   1248.      0.     27.      0.   1754.    456.     77.   1402.
1248.    154.   1248.      0. Hgate_Limit       -1.000
ISF         ISF         1980  SEP   3898.      0.   1178.      0.      0.      0.      0.      0.      0.      0.
0.      0.   1178.   2719.      0.      0.      0.   1178.      0.     32.      0.   1751.    456.      0.   1327.
1178.    149.   1178.      0. Hgate_Limit       -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ ____________ ___________
ISF         ISF         1980  TOT  47421.      0.  19417.      0.      0.      0.      0.      0.      0.      0.
0.      0.  19417.  28004.      0.      0.      0.  19417.      0.  31174.      0.  19336.   4522.    374.  46361.
19417.   1810.  44551.  25135. NA                 -1.000


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    STRUCTURE ID (0 = total)  : Baseflow       -10003
    STRUCTURE ACCT (0 = total): 0
    STRUCTURE NAME            : Bottom Instream Flow
    RIVER LOCATION - FROM     : ISF.01       Bottom Instream Flow
    RIVER LOCATION - TO       : ISF.01       Bottom Instream Flow



Shortage                 Water Use
                                        Demand              From River By                    From Carrier By
Carried                 ============== ===============================
Structure   River                      ============== ==============================    From    =====================
Exchange  From  Total   Total    CU             To    Total           Upstrm
ID          ID          Year   Mo   Total    CU   Priorty Storage Exc_Pln   Loss    Well    Priorty Sto_Exc  Loss
Bypass     SM  Supply   Short   Short    CU   SoilM   Return    Loss    Inflow

            Station In/Out                          Station Balance
===================================== =============================================
Reach   Return Well    From/To River   River  River   River   Avail Control  Control
 Gain   Flow  Deplete GW Stor  Inflow  Divert By Well Outflow Flow  Location Right
Baseflow    ISF.01      1979  OCT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    640.      0.      0.      0.      0.    640.
0.      0.    640.      0. NA              -1.000
Baseflow    ISF.01      1979  NOV      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.    997.      0.      0.      0.      0.    997.
0.      0.    997.      0. NA              -1.000
Baseflow    ISF.01      1979  DEC      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1250.      0.      0.      0.      0.   1250.
0.      0.   1250.      0. NA              -1.000
Baseflow    ISF.01      1980  JAN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1201.      0.      0.      0.      0.   1201.
0.      0.   1201.      0. NA              -1.000
Baseflow    ISF.01      1980  FEB      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1266.      0.      0.      0.      0.   1266.
0.      0.   1266.      0. NA              -1.000
Baseflow    ISF.01      1980  MAR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1195.      0.      0.      0.      0.   1195.
0.      0.   1195.      0. NA              -1.000
Baseflow    ISF.01      1980  APR      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1280.      0.      0.      0.      0.   1280.
0.      0.   1280.      0. NA              -1.000
Baseflow    ISF.01      1980  MAY      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.  16413.      0.      0.      0.      0.  16413.
0.      0.  16413.  12386. NA              -1.000
Baseflow    ISF.01      1980  JUN      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.  16646.      0.      0.      0.      0.  16646.
0.      0.  16646.  12749. NA              -1.000
Baseflow    ISF.01      1980  JUL      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1236.      0.      0.      0.      0.   1236.
0.      0.   1236.      0. NA              -1.000
Baseflow    ISF.01      1980  AUG      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1248.      0.      0.      0.      0.   1248.
0.      0.   1248.      0. NA              -1.000
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Baseflow    ISF.01       1980  SEP      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.   1178.      0.      0.      0.      0.   1178.
0.      0.   1178.      0. NA               -1.000
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ ___________ ___________
Baseflow    ISF.01       1980  TOT      0.      0.      0.      0.      0.      0.      0.      0.      0.      0.
0.      0.      0.      0.      0.      0.      0.      0.      0.  44551.      0.      0.      0.      0.  44551.
0.      0.  44551.  25135. NA               -1.000

#
# _________________________________________________________________________________
# *.xwe       Well Structure Summary
#
#   STATEMOD
#   StateMod Operating Rule Example - ex14.* data set
#
# Statemod Version: 12.29.05 Date = 2008/10/23)
# Run date:          11/ 6/ 8 16:20:47
# Time Step:         Monthly
#
# _________________________________________________________________________________
 Well Water Only Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex14.* data set
PAGE NO.   1

    STRUCTURE ID (0 _ total)  : Wel_1
    STRUCTURE ACCT (0 _ total): 0
    STRUCTURE NAME            : Well Structure 1


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Well Capacity           :     1     5000.   297525.   307442.
      Well Rights             :     1       10.      595.      615.

                                        Demand              Water Supply                Short                   Water
Use                                            Water Source
                                    ============== ================================ ==============
================================================= ======== ================================
Structure   River                    Total    CU     From    From   From    Total    Total   CU     Total    To
Total Total   From  From      From    From    Total
ID          ID           Year   Mo   Demand  Demand  Well    SW     Soil    Supply   Short  Short    CU      Soil
Return    Loss   Carried Use    River GwStor   Salvage  Soil   Source
================================== ============== ================================ ==============
================================================ ======== ================================
Wel_1       Wel_1        1979  OCT   3000.   1500.    615.      0.      0.    615.   2385.   1193.    307.      0.
154.    154.      0.    615.    154.    461.      0.      0.    615.
Wel_1       Wel_1        1979  OCT  3000.0  1500.0   614.9     0.0     0.0   614.9  2385.1  1192.6   307.4     0.0
153.7   153.7     0.0   614.9   153.7   461.2     0.0     0.0   614.9
Wel_1       Wel_1        1979  OCT 3000.00 1500.00  614.89    0.00    0.00  614.89 2385.11 1192.56  307.44    0.00
153.72  153.72    0.00  614.89  153.72  461.16    0.00    0.00  614.89
Wel_1       Wel_1        1979  NOV   3000.   1500.    595.      0.      0.    595.   2405.   1202.    298.      0.
149.    149.      0.    595.    149.    446.      0.      0.    595.
Wel_1       Wel_1        1979  NOV  3000.0  1500.0   595.0     0.0     0.0   595.0  2404.9  1202.5   297.5     0.0
148.8   148.8     0.0   595.0   148.8   446.3     0.0     0.0   595.0
Wel_1       Wel_1        1979  NOV 3000.00 1500.00  595.05    0.00    0.00  595.05 2404.95 1202.47  297.52    0.00
148.76  148.76    0.00  595.05  148.76  446.29    0.00    0.00  595.05
Wel_1       Wel_1        1979  DEC   3000.   1500.    615.      0.      0.    615.   2385.   1193.    307.      0.
154.    154.      0.    615.    154.    461.      0.      0.    615.
Wel_1       Wel_1        1979  DEC  3000.0  1500.0   614.9     0.0     0.0   614.9  2385.1  1192.6   307.4     0.0
153.7   153.7     0.0   614.9   153.7   461.2     0.0     0.0   614.9
Wel_1       Wel_1        1979  DEC 3000.00 1500.00  614.89    0.00    0.00  614.89 2385.11 1192.56  307.44    0.00
153.72  153.72    0.00  614.89  153.72  461.16    0.00    0.00  614.89
Wel_1       Wel_1        1980  JAN   3000.   1500.    615.      0.      0.    615.   2385.   1193.    307.      0.
154.    154.      0.    615.    154.    461.      0.      0.    615.
Wel_1       Wel_1        1980  JAN  3000.0  1500.0   614.9     0.0     0.0   614.9  2385.1  1192.6   307.4     0.0
153.7   153.7     0.0   614.9   153.7   461.2     0.0     0.0   614.9
Wel_1       Wel_1        1980  JAN 3000.00 1500.00  614.89    0.00    0.00  614.89 2385.11 1192.56  307.44    0.00
153.72  153.72    0.00  614.89  153.72  461.16    0.00    0.00  614.89
Wel_1       Wel_1        1980  FEB   3000.   1500.    555.      0.      0.    555.   2445.   1222.    278.      0.
139.    139.      0.    555.    139.    417.      0.      0.    555.
Wel_1       Wel_1        1980  FEB  3000.0  1500.0   555.4     0.0     0.0   555.4  2444.6  1222.3   277.7     0.0
138.8   138.8     0.0   555.4   138.8   416.5     0.0     0.0   555.4
Wel_1       Wel_1        1980  FEB 3000.00 1500.00  555.38    0.00    0.00  555.38 2444.62 1222.31  277.69    0.00
138.85  138.85    0.00  555.38  138.85  416.54    0.00    0.00  555.38
Wel_1       Wel_1        1980  MAR   3000.   1500.    615.      0.      0.    615.   2385.   1193.    307.      0.
154.    154.      0.    615.    154.    461.      0.      0.    615.
Wel_1       Wel_1        1980  MAR  3000.0  1500.0   614.9     0.0     0.0   614.9  2385.1  1192.6   307.4     0.0
153.7   153.7     0.0   614.9   153.7   461.2     0.0     0.0   614.9
Wel_1       Wel_1        1980  MAR 3000.00 1500.00  614.89    0.00    0.00  614.89 2385.11 1192.56  307.44    0.00
153.72  153.72    0.00  614.89  153.72  461.16    0.00    0.00  614.89
Wel_1       Wel_1        1980  APR   3000.   1500.    595.      0.      0.    595.   2405.   1202.    298.      0.
149.    149.      0.    595.    149.    446.      0.      0.    595.
Wel_1       Wel_1        1980  APR  3000.0  1500.0   595.0     0.0     0.0   595.0  2404.9  1202.5   297.5     0.0
148.8   148.8     0.0   595.0   148.8   446.3     0.0     0.0   595.0
Wel_1       Wel_1        1980  APR 3000.00 1500.00  595.05    0.00    0.00  595.05 2404.95 1202.47  297.52    0.00
148.76  148.76    0.00  595.05  148.76  446.29    0.00    0.00  595.05
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Wel_1       Wel_1        1980  MAY   3000.   1500.    615.      0.      0.    615.   2385.   1193.    307.      0.
154.    154.      0.   615.   154.   461.      0.      0.   615.
Wel_1       Wel_1        1980  MAY  3000.0  1500.0   614.9     0.0     0.0   614.9  2385.1  1192.6   307.4     0.0
153.7   153.7     0.0   614.9   153.7   461.2     0.0     0.0   614.9
Wel_1       Wel_1        1980  MAY 3000.00 1500.00  614.89    0.00    0.00  614.89 2385.11 1192.56  307.44    0.00
153.72  153.72    0.00  614.89  153.72  461.16    0.00    0.00  614.89
Wel_1       Wel_1        1980  JUN   3000.   1500.    595.      0.      0.    595.   2405.   1202.    298.      0.
149.    149.      0.   595.   149.   446.      0.      0.   595.
Wel_1       Wel_1        1980  JUN  3000.0  1500.0   595.0     0.0     0.0   595.0  2404.9  1202.5   297.5     0.0
148.8   148.8     0.0   595.0   148.8   446.3     0.0     0.0   595.0
Wel_1       Wel_1        1980  JUN 3000.00 1500.00  595.05    0.00    0.00  595.05 2404.95 1202.47  297.52    0.00
148.76  148.76    0.00  595.05  148.76  446.29    0.00    0.00  595.05
Wel_1       Wel_1        1980  JUL   3000.   1500.    615.      0.      0.    615.   2385.   1193.    307.      0.
154.    154.      0.   615.   154.   461.      0.      0.   615.
Wel_1       Wel_1        1980  JUL  3000.0  1500.0   614.9     0.0     0.0   614.9  2385.1  1192.6   307.4     0.0
153.7   153.7     0.0   614.9   153.7   461.2     0.0     0.0   614.9
Wel_1       Wel_1        1980  JUL 3000.00 1500.00  614.89    0.00    0.00  614.89 2385.11 1192.56  307.44    0.00
153.72  153.72    0.00  614.89  153.72  461.16    0.00    0.00  614.89
Wel_1       Wel_1        1980  AUG   3000.   1500.    615.      0.      0.    615.   2385.   1193.    307.      0.
154.    154.      0.   615.   154.   461.      0.      0.   615.
Wel_1       Wel_1        1980  AUG  3000.0  1500.0   614.9     0.0     0.0   614.9  2385.1  1192.6   307.4     0.0
153.7   153.7     0.0   614.9   153.7   461.2     0.0     0.0   614.9
Wel_1       Wel_1        1980  AUG 3000.00 1500.00  614.89    0.00    0.00  614.89 2385.11 1192.56  307.44    0.00
153.72  153.72    0.00  614.89  153.72  461.16    0.00    0.00  614.89
Wel_1       Wel_1        1980  SEP   3000.   1500.    595.      0.      0.    595.   2405.   1202.    298.      0.
149.    149.      0.   595.   149.   446.      0.      0.   595.
Wel_1       Wel_1        1980  SEP  3000.0  1500.0   595.0     0.0     0.0   595.0  2404.9  1202.5   297.5     0.0
148.8   148.8     0.0   595.0   148.8   446.3     0.0     0.0   595.0
Wel_1       Wel_1        1980  SEP 3000.00 1500.00  595.05    0.00    0.00  595.05 2404.95 1202.47  297.52    0.00
148.76  148.76    0.00  595.05  148.76  446.29    0.00    0.00  595.05
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______
Wel_1       Wel_1        1980  TOT  36000.  18000.   7240.      0.      0.   7240.  28760.  14380.   3620.      0.
1810.   1810.      0.   7240.   1810.   5430.      0.      0.   7240.

Well Water Only Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex7.* data set
PAGE NO.   2

    STRUCTURE ID (0 _ total)  : Wel_2
    STRUCTURE ACCT (0 _ total): 0
    STRUCTURE NAME            : Well Structure 2


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Well Capacity           :     1     5000.   297525.   307442.
      Well Rights             :     1        5.      298.      307.


                                        Demand              Water Supply               Short                  Water
Use                                            Water Source
                                        ============== ================================ ==============
=============================================== ======== ================================
Structure   River                   Total    CU     From    From   From    Total    Total   CU     Total    To
Total Total   From  From      From    From    Total
ID          ID           Year   Mo   Demand  Demand  Well     SW     Soil    Supply   Short  Short    CU      Soil
Return    Loss   Carried Use    River GwStor   Salvage  Soil   Source
=============================== ============== =============================== ==============
=============================================== ======== ================================
Wel_2       Wel_2        1979  OCT   1000.    500.    307.      0.      0.    307.    693.    346.    154.      0.
154.      0.      0.   307.    77.   231.      0.      0.   307.
Wel_2       Wel_2        1979  OCT  1000.0   500.0   307.4     0.0     0.0   307.4   692.6   346.3   153.7     0.0
153.7     0.0     0.0   307.4    76.9   230.6     0.0     0.0   307.4
Wel_2       Wel_2        1979  OCT 1000.00  500.00  307.44    0.00    0.00  307.44  692.56  346.28  153.72    0.00
153.72    0.00    0.00  307.44   76.86  230.58    0.00    0.00  307.44
Wel_2       Wel_2        1979  NOV   1000.    500.    298.      0.      0.    298.    702.    351.    149.      0.
149.      0.      0.   298.    74.   223.      0.      0.   298.
Wel_2       Wel_2        1979  NOV  1000.0   500.0   297.5     0.0     0.0   297.5   702.5   351.2   148.8     0.0
148.8     0.0     0.0   297.5    74.4   223.1     0.0     0.0   297.5
Wel_2       Wel_2        1979  NOV 1000.00  500.00  297.52    0.00    0.00  297.52  702.48  351.24  148.76    0.00
148.76    0.00    0.00  297.52   74.38  223.14    0.00    0.00  297.52
Wel_2       Wel_2        1979  DEC   1000.    500.    307.      0.      0.    307.    693.    346.    154.      0.
154.      0.      0.   307.    77.   231.      0.      0.   307.
Wel_2       Wel_2        1979  DEC  1000.0   500.0   307.4     0.0     0.0   307.4   692.6   346.3   153.7     0.0
153.7     0.0     0.0   307.4    76.9   230.6     0.0     0.0   307.4
Wel_2       Wel_2        1979  DEC 1000.00  500.00  307.44    0.00    0.00  307.44  692.56  346.28  153.72    0.00
153.72    0.00    0.00  307.44   76.86  230.58    0.00    0.00  307.44
Wel_2       Wel_2        1980  JAN   1000.    500.    307.      0.      0.    307.    693.    346.    154.      0.
154.      0.      0.   307.    77.   231.      0.      0.   307.
Wel_2       Wel_2        1980  JAN  1000.0   500.0   307.4     0.0     0.0   307.4   692.6   346.3   153.7     0.0
153.7     0.0     0.0   307.4    76.9   230.6     0.0     0.0   307.4
Wel_2       Wel_2        1980  JAN 1000.00  500.00  307.44    0.00    0.00  307.44  692.56  346.28  153.72    0.00
153.72    0.00    0.00  307.44   76.86  230.58    0.00    0.00  307.44
Wel_2       Wel_2        1980  FEB   1000.    500.    278.      0.      0.    278.    722.    361.    139.      0.
139.      0.      0.   278.    69.   208.      0.      0.   278.
Wel_2       Wel_2        1980  FEB  1000.0   500.0   277.7     0.0     0.0   277.7   722.3   361.2   138.8     0.0
138.8     0.0     0.0   277.7    69.4   208.3     0.0     0.0   277.7
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Wel_2       Wel_2       1980  FEB 1000.00  500.00  277.69    0.00    0.00  277.69  722.31  361.15  138.85    0.00
138.85    0.00    0.00  277.69   69.42  208.27    0.00    0.00  277.69
Wel_2       Wel_2       1980  MAR   1000.    500.    307.      0.      0.    307.    693.    346.    154.      0.
154.      0.      0.    307.     77.    231.      0.      0.    307.
Wel_2       Wel_2       1980  MAR  1000.0   500.0   307.4     0.0     0.0   307.4   692.6   346.3   153.7     0.0
153.7     0.0     0.0   307.4    76.9   230.6     0.0     0.0   307.4
Wel_2       Wel_2       1980  MAR 1000.00  500.00  307.44    0.00    0.00  307.44  692.56  346.28  153.72    0.00
153.72    0.00    0.00  307.44   76.86  230.58    0.00    0.00  307.44
Wel_2       Wel_2       1980  APR   1000.    500.    298.      0.      0.    298.    702.    351.    149.      0.
149.      0.      0.    298.     74.    223.      0.      0.    298.
Wel_2       Wel_2       1980  APR  1000.0   500.0   297.5     0.0     0.0   297.5   702.5   351.2   148.8     0.0
148.8     0.0     0.0   297.5    74.4   223.1     0.0     0.0   297.5
Wel_2       Wel_2       1980  APR 1000.00  500.00  297.52    0.00    0.00  297.52  702.48  351.24  148.76    0.00
148.76    0.00    0.00  297.52   74.38  223.14    0.00    0.00  297.52
Wel_2       Wel_2       1980  MAY   1000.    500.    307.      0.      0.    307.    693.    346.    154.      0.
154.      0.      0.    307.     77.    231.      0.      0.    307.
Wel_2       Wel_2       1980  MAY  1000.0   500.0   307.4     0.0     0.0   307.4   692.6   346.3   153.7     0.0
153.7     0.0     0.0   307.4    76.9   230.6     0.0     0.0   307.4
Wel_2       Wel_2       1980  MAY 1000.00  500.00  307.44    0.00    0.00  307.44  692.56  346.28  153.72    0.00
153.72    0.00    0.00  307.44   76.86  230.58    0.00    0.00  307.44
Wel_2       Wel_2       1980  JUN   1000.    500.    298.      0.      0.    298.    702.    351.    149.      0.
149.      0.      0.    298.     74.    223.      0.      0.    298.
Wel_2       Wel_2       1980  JUN  1000.0   500.0   297.5     0.0     0.0   297.5   702.5   351.2   148.8     0.0
148.8     0.0     0.0   297.5    74.4   223.1     0.0     0.0   297.5
Wel_2       Wel_2       1980  JUN 1000.00  500.00  297.52    0.00    0.00  297.52  702.48  351.24  148.76    0.00
148.76    0.00    0.00  297.52   74.38  223.14    0.00    0.00  297.52
Wel_2       Wel_2       1980  JUL   1000.    500.    307.      0.      0.    307.    693.    346.    154.      0.
154.      0.      0.    307.     77.    231.      0.      0.    307.
Wel_2       Wel_2       1980  JUL  1000.0   500.0   307.4     0.0     0.0   307.4   692.6   346.3   153.7     0.0
153.7     0.0     0.0   307.4    76.9   230.6     0.0     0.0   307.4
Wel_2       Wel_2       1980  JUL 1000.00  500.00  307.44    0.00    0.00  307.44  692.56  346.28  153.72    0.00
153.72    0.00    0.00  307.44   76.86  230.58    0.00    0.00  307.44
Wel_2       Wel_2       1980  AUG   1000.    500.    307.      0.      0.    307.    693.    346.    154.      0.
154.      0.      0.    307.     77.    231.      0.      0.    307.
Wel_2       Wel_2       1980  AUG  1000.0   500.0   307.4     0.0     0.0   307.4   692.6   346.3   153.7     0.0
153.7     0.0     0.0   307.4    76.9   230.6     0.0     0.0   307.4
Wel_2       Wel_2       1980  AUG 1000.00  500.00  307.44    0.00    0.00  307.44  692.56  346.28  153.72    0.00
153.72    0.00    0.00  307.44   76.86  230.58    0.00    0.00  307.44
Wel_2       Wel_2       1980  SEP   1000.    500.    298.      0.      0.    298.    702.    351.    149.      0.
149.      0.      0.    298.     74.    223.      0.      0.    298.
Wel_2       Wel_2       1980  SEP  1000.0   500.0   297.5     0.0     0.0   297.5   702.5   351.2   148.8     0.0
148.8     0.0     0.0   297.5    74.4   223.1     0.0     0.0   297.5
Wel_2       Wel_2       1980  SEP 1000.00  500.00  297.52    0.00    0.00  297.52  702.48  351.24  148.76    0.00
148.76    0.00    0.00  297.52   74.38  223.14    0.00    0.00  297.52
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______ _______
Wel_2       Wel_2       1980  TOT  12000.   6000.   3620.      0.      0.   3620.   8380.   4190.   1810.      0.
1810.      0.      0.   3620.    905.   2715.      0.      0.   3620.

 Well Water Only Summary  ACFT
     STATEMOD
     StateMod Operating Rule Example - ex7.* data set
PAGE NO.   3

    STRUCTURE ID (0 _ total)  : Wel_3
    STRUCTURE ACCT (0 _ total): 0
    STRUCTURE NAME            : Well_3 to Dem_3


    STRUCTURE DATA            :     #       cfs     af@30     af@31
                                  _____ _________ _________ _________
      Well Capacity           :     1     5000.   297525.   307442.
      Well Rights             :     2       55.     3273.     3382.


                                        Demand             Water Supply              Short                 Water
Use                                            Water Source
                                    ============== ============================== ==============
================================== ============== ======== ==============================
Structure   River                 Total    CU     From    From   From    Total    Total   CU     Total    To
Total Total   From  From      From    From    Total
ID          ID           Year   Mo   Demand  Demand  Well    SW     Soil    Supply   Short  Short    CU      Soil
Return    Loss   Carried Use    River GwStor   Salvage  Soil   Source
================================== ============== ============================== ==============
================================== ============== ======== ==============================
Wel_3       Dem_3       1979  OCT   1000.    500.   1000.      0.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.    125.    375.    500.      0.   1000.
Wel_3       Dem_3       1979  OCT  1000.0   500.0  1000.0     0.0     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0   125.0   375.0   500.0     0.0  1000.0
Wel_3       Dem_3       1979  OCT 1000.00  500.00 1000.00    0.00    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  125.00  375.00  500.00    0.00 1000.00
Wel_3       Dem_3       1979  NOV   1000.    500.    222.    778.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.    806.     83.    111.      0.   1000.
Wel_3       Dem_3       1979  NOV  1000.0   500.0   222.2   777.8     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0   805.6    83.3   111.1     0.0  1000.0
Wel_3       Dem_3       1979  NOV 1000.00  500.00  222.22  777.78    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  805.56   83.33  111.11    0.00 1000.00
Wel_3       Dem_3       1979  DEC   1000.    500.    306.    694.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.    732.    115.    153.      0.   1000.
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Wel_3       Dem_3       1979  DEC  1000.0   500.0   306.2   693.8     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0   732.1   114.8   153.1     0.0  1000.0
Wel_3       Dem_3       1979  DEC 1000.00  500.00  306.18  693.82    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  732.09  114.82  153.09    0.00 1000.00
Wel_3       Dem_3       1980  JAN   1000.    500.    456.    544.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.    601.    171.    228.      0.   1000.
Wel_3       Dem_3       1980  JAN  1000.0   500.0   456.4   543.6     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0   600.7   171.1   228.2     0.0  1000.0
Wel_3       Dem_3       1980  JAN 1000.00  500.00  456.39  543.61    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  600.66  171.15  228.20    0.00 1000.00
Wel_3       Dem_3       1980  FEB   1000.    500.    366.    634.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.    680.    137.    183.      0.   1000.
Wel_3       Dem_3       1980  FEB  1000.0   500.0   365.8   634.2     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0   679.9   137.2   182.9     0.0  1000.0
Wel_3       Dem_3       1980  FEB 1000.00  500.00  365.79  634.21    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  679.93  137.17  182.89    0.00 1000.00
Wel_3       Dem_3       1980  MAR   1000.    500.    393.    607.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.    656.    147.    197.      0.   1000.
Wel_3       Dem_3       1980  MAR  1000.0   500.0   393.0   607.0     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0   656.1   147.4   196.5     0.0  1000.0
Wel_3       Dem_3       1980  MAR 1000.00  500.00  393.02  606.98    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  656.11  147.38  196.51    0.00 1000.00
Wel_3       Dem_3       1980  APR   1000.    500.    398.    602.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.    652.    149.    199.      0.   1000.
Wel_3       Dem_3       1980  APR  1000.0   500.0   397.6   602.4     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0   652.1   149.1   198.8     0.0  1000.0
Wel_3       Dem_3       1980  APR 1000.00  500.00  397.58  602.42    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  652.12  149.09  198.79    0.00 1000.00
Wel_3       Dem_3       1980  MAY   1000.    500.      0.   1000.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.   1000.      0.      0.      0.   1000.
Wel_3       Dem_3       1980  MAY  1000.0   500.0     0.0  1000.0     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0  1000.0     0.0     0.0     0.0  1000.0
Wel_3       Dem_3       1980  MAY 1000.00  500.00    0.00 1000.00    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00 1000.00    0.00    0.00    0.00 1000.00
Wel_3       Dem_3       1980  JUN   1000.    500.      0.   1000.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.   1000.      0.      0.      0.   1000.
Wel_3       Dem_3       1980  JUN  1000.0   500.0     0.0  1000.0     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0  1000.0     0.0     0.0     0.0  1000.0
Wel_3       Dem_3       1980  JUN 1000.00  500.00    0.00 1000.00    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00 1000.00    0.00    0.00    0.00 1000.00
Wel_3       Dem_3       1980  JUL   1000.    500.    101.    899.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.    911.     38.     51.      0.   1000.
Wel_3       Dem_3       1980  JUL  1000.0   500.0   101.3   898.7     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0   911.4    38.0    50.6     0.0  1000.0
Wel_3       Dem_3       1980  JUL 1000.00  500.00  101.25  898.75    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  911.40   37.97   50.63    0.00 1000.00
Wel_3       Dem_3       1980  AUG   1000.    500.    219.    781.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.    809.     82.    109.      0.   1000.
Wel_3       Dem_3       1980  AUG  1000.0   500.0   218.5   781.5     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0   808.8    81.9   109.3     0.0  1000.0
Wel_3       Dem_3       1980  AUG 1000.00  500.00  218.53  781.47    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  808.79   81.95  109.27    0.00 1000.00
Wel_3       Dem_3       1980  SEP   1000.    500.    255.    745.      0.   1000.      0.      0.    500.      0.
500.      0.      0.   1000.    777.     96.    127.      0.   1000.
Wel_3       Dem_3       1980  SEP  1000.0   500.0   255.0   745.0     0.0  1000.0     0.0     0.0   500.0     0.0
500.0     0.0     0.0  1000.0   776.9    95.6   127.5     0.0  1000.0
Wel_3       Dem_3       1980  SEP 1000.00  500.00  254.95  745.05    0.00 1000.00    0.00    0.00  500.00    0.00
500.00    0.00    0.00 1000.00  776.92   95.61  127.48    0.00 1000.00
___________ ___________  ____ ____ _______ _______ _______ _______ _______ _______ _______ _______ _______ _______
_______ _______ _______ _______ _______ _______ _______
Wel_3       Dem_3       1980  TOT  12000.   6000.   3716.   8284.      0.  12000.      0.      0.   6000.      0.
6000.      0.      0.  12000.   8749.   1393.   1858.      0.  12000.
#
#
# ________________________________________________________________________________
# *.xgw       Ground Water Budget
#
#   STATEMOD
#   StateMod Operating Rule Example - ex14.* data set
#
# Statemod Version: 12.29.05 Date = 2008/10/23)
# Run date:          11/ 6/ 8 16:20:58
# Time Step:         Monthly
#
# ________________________________________________________________________________

                              Ground Water Budget  ACFT

                       From River        Well       Other       Total       Total                                    To/Fr
Other       Total
 Year   Mo Recharge(1)     by Well   Depletion  Inflows(2)      Inflow     Pumping      Return        Loss   GwStorage
Outflows(3)     Outflow    Delta(4)  Salvage(5)
                   (+)         (+)         (+)         (+)          NA         (-)         (-)         (-)         (-)
(-)          NA          NA          NA
                  ( 1)        ( 2)        ( 3)        ( 4)        ( 5)        ( 6)        ( 7)        ( 8)        ( 9)
(10)        (11)        (12)        (13)
 ____ ____ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________ ___________
___________ ___________ ___________ ___________
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1979	OCT	3978.	356.	0.	-1.	4333.	1922.	1752.	154.	77.	-1.	3905.	428.	500.
1979	NOV	4046.	251.	356.	-1.	4653.	1115.	3381.	149.	0.	-1.	4644.	8.	111.
1979	DEC	4061.	269.	607.	-1.	4937.	1229.	3742.	154.	77.	-1.	5202.	-265.	153.
1980	JAN	4061.	288.	875.	-1.	5224.	1379.	3907.	154.	0.	-1.	5440.	-216.	228.
1980	FEB	4017.	254.	807.	-1.	5078.	1199.	3893.	139.	69.	-1.	5300.	-222.	183.
1980	MAR	4061.	280.	810.	-1.	5151.	1315.	3893.	154.	0.	-1.	5362.	-210.	197.
1980	APR	4046.	273.	821.	-1.	5140.	1290.	3902.	149.	74.	-1.	5416.	-275.	199.
1980	MAY	4311.	231.	807.	-1.	5348.	922.	4027.	154.	-77.	-1.	5027.	322.	0.
1980	JUN	4296.	223.	783.	-1.	5303.	893.	4152.	149.	0.	-1.	5194.	109.	0.
1980	JUL	4061.	243.	727.	-1.	5031.	1024.	4027.	154.	77.	-1.	5282.	-251.	51.
1980	AUG	4061.	258.	697.	-1.	5016.	1141.	3907.	154.	77.	-1.	5279.	-263.	109.
1980	SEP	4046.	255.	724.	-1.	5026.	1148.	3902.	149.	0.	-1.	5199.	-173.	127.
1980	Tot	49046.	3179.	8014.	-1.	60240.	14576.	44488.	1810.	374.	-1.	59587.	654.	1858.

Ground Water Budget ACFT

Year	Mo	Recharge(1)	From River by Well	Well Depletion	Other Inflows(2)	Total Inflow	Total Pumping	Return	Loss	To/Fr GwStorage	Other Outflows(3)	Total Outflow	Delta(4)	Salvage(5)
		(+)	(+)	(+)	(+)	NA	(-)	(-)	(-)	(-)	(-)	NA	NA	NA
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Ave	OCT	3978.	356.	0.	-1.	4333.	1922.	1752.	154.	77.	-1.	3905.	428.	500.
Ave	NOV	4046.	251.	356.	-1.	4653.	1115.	3381.	149.	0.	-1.	4644.	8.	111.
Ave	DEC	4061.	269.	607.	-1.	4937.	1229.	3742.	154.	77.	-1.	5202.	-265.	153.
Ave	JAN	4061.	288.	875.	-1.	5224.	1379.	3907.	154.	0.	-1.	5440.	-216.	228.
Ave	FEB	4017.	254.	807.	-1.	5078.	1199.	3893.	139.	69.	-1.	5300.	-222.	183.
Ave	MAR	4061.	280.	810.	-1.	5151.	1315.	3893.	154.	0.	-1.	5362.	-210.	197.
Ave	APR	4046.	273.	821.	-1.	5140.	1290.	3902.	149.	74.	-1.	5416.	-275.	199.
Ave	MAY	4311.	231.	807.	-1.	5348.	922.	4027.	154.	-77.	-1.	5027.	322.	0.
Ave	JUN	4296.	223.	783.	-1.	5303.	893.	4152.	149.	0.	-1.	5194.	109.	0.
Ave	JUL	4061.	243.	727.	-1.	5031.	1024.	4027.	154.	77.	-1.	5282.	-251.	51.
Ave	AUG	4061.	258.	697.	-1.	5016.	1141.	3907.	154.	77.	-1.	5279.	-263.	109.
Ave	SEP	4046.	255.	724.	-1.	5026.	1148.	3902.	149.	0.	-1.	5199.	-173.	127.
Ave	Tot	49046.	3179.	8014.	-1.	60240.	14576.	44488.	1810.	374.	-1.	61248.	-1008.	1858.

Note: (1) Recharge = Divert + Pumping - CU - Soil Moisture Change. Recharge and CU are for both surface and ground water. CU does not include reservoir evaporation.
(2) Other Inflows to ground water not modeled include natural stream loss, precipitation recharge, boundary inflow, etc.
(3) Other Outflows from ground water not modeled include natural stream gain, boundary outflow, CU by native species, etc.
(4) Delta is Total Inflow - Total Outflow but remember Other Inflows and Other Outflows are not included.
(5) Salvage is not part of the Ground Water Balance because it is a net change from native ET to agricultural CU.

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cdssnews@state.co.us

Last updated: 2012zx