DRAFT

ENERGY DEVELOPMENT WATER NEEDS ASSESSMENT (PHASE 1 REPORT)

Prepared for

Colorado, Yampa, and White River Basin Roundtables
Energy Subcommittee

September 2008

URS

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List of Acronyms

AGNC	Associated Governments of Northwest Colorado
ATP	Alberta Taciuk Process
BBC	BBC Research & Consulting
bbl	barrel
Bcf	billion cubic feet
bgs	below ground surface
BLM	U.S. Bureau of Land Management
bpd	barrels per day
BTU	British thermal unit
CERI	Canadian Energy Research Institute
cfs	cubic feet per second
CO_2	carbon dioxide
COGCC	Colorado Oil and Gas Conservation Commission
CWCB	Colorado Water Conservation Board
DOE	U.S. Department of Energy
DOI	U.S. Department of the Interior
DOLA	Colorado Department of Local Affairs
DRI	Denver Research Institute
DWR	Division of Water Resources
EIS	Environmental Impact Statement
gal	gallon
GIP	gas in place
gpcd	gallons per capita per day
HB	House Bill
ICP	In-Situ Conversion Process
KWh	kilowatt-hour
Mcf	million cubic feet
MW	megawatts
MWh	megawatt-hours
NEPA	National Environmental Policy Act
NGCC	natural gas combined cycle
NOSA	National Oil Shale Association
NSURM	National Strategic Unconventional Resource Model

List of Acronyms

O&M	operating and maintenance
OSEC	Oil Shale Exploration Company
OTA	Office of Technology Assessment
PEIS	Programmatic Environmental Impact Statement
RD&D	Research Development and Demonstration
RFDS	Reasonably Foreseeable Development Scenario
SWSI	Statewide Water Supply Initiative
Tcf	trillion cubic feet
tpy	tons per year
URS	URS Corporation
WRFO	White River Field Office

The purpose of this study, the Energy Development Water Needs Assessment, is to estimate the water demands needed to support the extraction and production of energy in four sectors in northwest Colorado (Figure ES-1, Study Area) including natural gas, coal, uranium, and oil shale. This study was conducted in conformance with the legislative intent specified in House Bill (HB) 05-1177 and supported by the Colorado and Yampa/White River Roundtables. These Roundtables are seeking to use data and information from this study, in conjunction with the Statewide Water Supply Initiative (SWSI) and other appropriate sources, to assist with the development of a basin-wide consumptive and nonconsumptive water supply needs assessment. Further, this study serves the purpose of providing data and information necessary to help plan for meeting those needs and using unappropriated waters where suitable. This investigation is supported through a grant obtained by the Colorado and Yampa/White River Basin Roundtables, funded by the Colorado Department of Natural Resources and the Colorado Water Conservation Board (CWCB).

Background

The abundance of natural resources and recent increases in exploration and production activities in northwest Colorado indicate there is significant potential for energy resource development. Recent studies have indicated that the Green River Formation in western Colorado may contain approximately 1.5 to 1.8 trillion barrels (bbl) of recoverable oil from shale. As a result of the recent energy development activities and the potential for continued development there is a need to assess the water-related impacts of energy resource development in northwestern Colorado, specifically within the Colorado, Yampa, and White River Basins (Figure ES-1). This study provides the foundation to meet the objectives of HB 05-1177 and the Colorado and Yampa/White River Roundtables by:

- Addressing the keen and growing interest of Colorado citizens and decision-makers to identify and understand the potential impacts and trends of energy development in this region by quantifying the water use demands associated with energy development.
- Recognizing the impacts of energy development extend beyond the confines of the subject study area in northwestern Colorado. Citizens throughout the State of Colorado and western region of the United States understand the energy resources in northwestern Colorado are part of a global energy perspective.

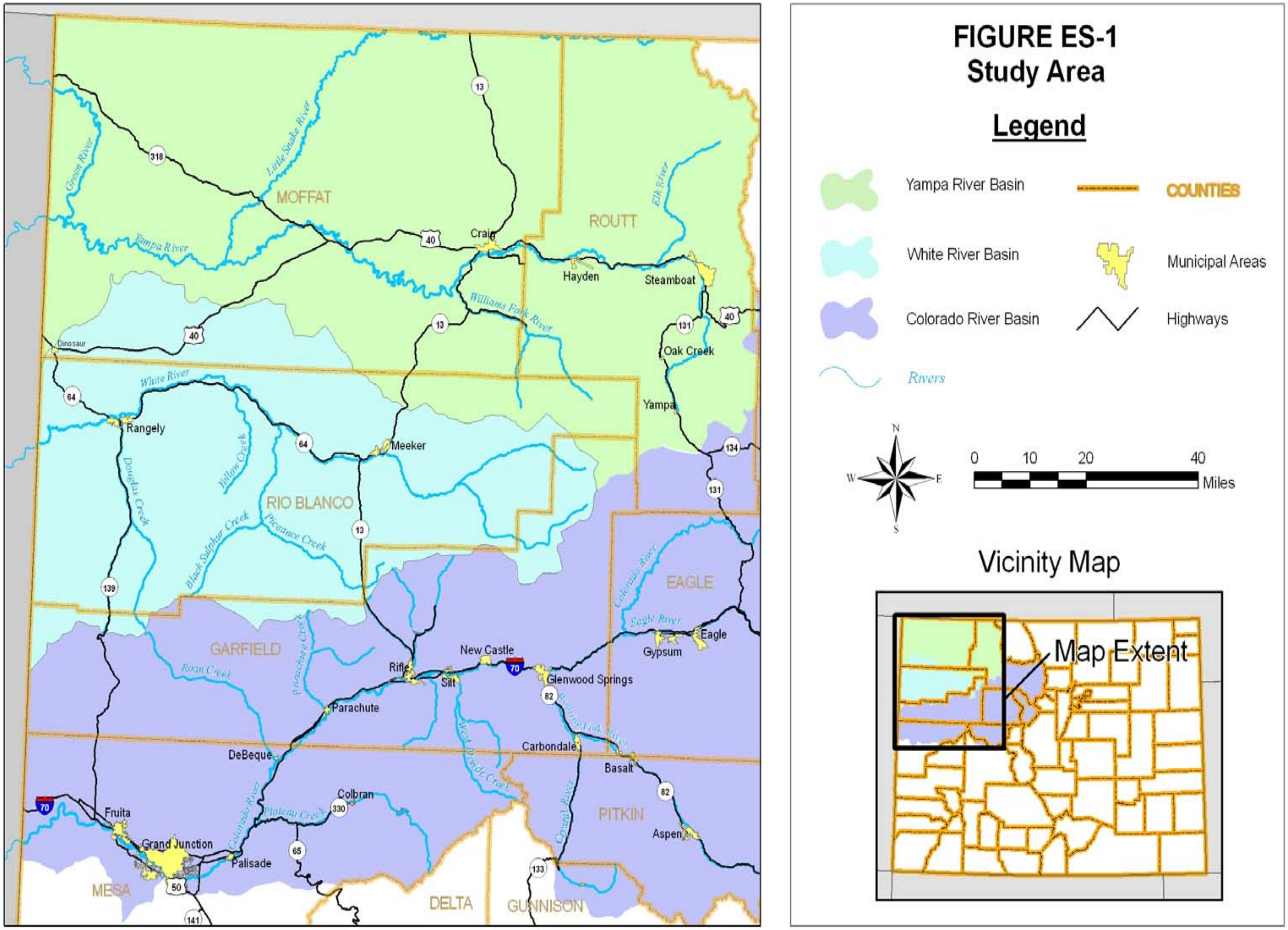


FIGURE ES-1
Study Area
Legend
Yampa River Basin
White River Basin
Colorado River Basin
Rivers
COUNTIES
Municipal Areas
Highways
0 10 20 40
Miles
Vicinity Map
Map Extent
MOFFAT
ROUTT
RIO BLANCO
GARFIELD
EAGLE
PITKIN
MESA
DELTA
GUNNISON
Craig
Hayden
Steamboat
Oak Creek
Yampa
Dinosaur
Rangely
Meeker
Rifle
Silt
New Castle
Glenwood Springs
Gypsum
Eagle
Parachute
Carbondale
Basalt
Aspen
DeBeque
Colbran
Fruita
Grand Junction
Palisade
Green River
Little Snake River
Yampa River
Elk River
Williams Fork River
White River
Yellow Creek
Douglas Creek
Black Sulphur Creek
Piceance Creek
Colorado River
Eagle River
Roan Creek
Parachute Creek
Roaring Fork River
Plateau Creek

- Providing data and information that may be used in collaboration with SWSI and other current and future investigations to determine the quantity and location of unappropriated waters that may be available within the study area to meet the potential water needs of energy development in northwestern Colorado, while protecting existing water rights.

The research performed as part of this study will assist members of the Roundtables and other water officials in making informed planning and development decisions through use of the data and technical information contained herein.

This report reflects the research and documentation of Phase 1 of the Energy Development Water Needs Assessment. The focus of the first phase was to quantify the varied amounts of water needed for natural gas, coal, uranium, and oil shale resource development under different production scenarios. Completion of Phase 1 entailed:

- Research of existing and available data and reports documenting the water demands needed for natural gas, coal, uranium, and oil shale development
- Definition of a series of energy production scenarios for near, mid-, and long-term planning horizons
- Compilation of a list of conditional water rights for the Colorado, Yampa, and White Rivers that can be developed by energy development companies

Phase 1 focused on three types of water demands as they relate to energy development:

- Direct water demands needed for the extraction and development of the energy resource (e.g., drilling, production, dust suppression, reclamation, washing)
- Indirect water demands to support the increases in community populations attributable to new jobs created by the energy industry
- Water demands associated with the thermoelectric power generation needed to supply the energy industry with electricity[1]

There is a relatively high degree of confidence in quantifying the water development needs for natural gas, coal, and thermoelectric power because substantial information and empirical data

[1] Electricity is required for extraction and production processes as well as the additional domestic electricity demands attributable to the energy-related increase in residential populations.

are available. The information to quantify the water demands for oil shale and uranium, however, is limited, thereby introducing more uncertainty into the estimates of water demands for these resources. In addition, the timing of the development of these energy resources in the study area is highly dependent upon global markets and available technologies to extract the resources. Additional work is needed to fully meet the objectives of the HB 05-1177 legislative mandate and the intent of the Colorado and Yampa/White River Roundtables. It is anticipated that follow-on phases such as Phase 2 will address the location, priority, and amount of water supplies available, in the context of both physical and legal water supply, and address alternatives to meet the energy-related water demands identified in Phase 1 in quantitative and qualitative terms.

Planning Horizons and Production Scenarios

Phase 1 of the Energy Development Water Needs Assessment, performed in collaboration with the Energy Subcommittee of the Colorado and Yampa-White Roundtables, focused on defining a range of energy production scenarios to support the analysis of water demands of four energy sectors (natural gas, coal, uranium, oil shale; with electricity from thermoelectric power) for near-, mid-, and long-term planning horizons. Although there are other water supply and demand studies elsewhere in Colorado, this investigation is unique in that it addresses the various components of energy development through discrete quantification and analysis of the direct, indirect, and thermoelectric water demands.

The boundaries by which the three planning horizons, near-, mid-, and long-term, were defined were based on other water supply and energy-related studies in Colorado.

- The near-term planning horizon (2007-2017) coincides with the ten year planning horizon described in the Associated Governments of Northwestern Colorado (AGNC) Study (BBC 2008). It builds upon existing natural gas and coal data for 2007 and continues through 2017.
- The mid-term planning horizon (2018-2035) was established to be consistent with the end of the AGNC Study. The SWSI Report has a similar timeframe, extending to 2030, within 5 years of the end of the mid-term planning horizon for this study.

- The long-term planning horizon (2036 and beyond) recognizes that energy development activity in the study area may continue beyond the next 27 years, with no certain endpoint. For purposes of this study 2050 is the endpoint of the long-term planning horizon.

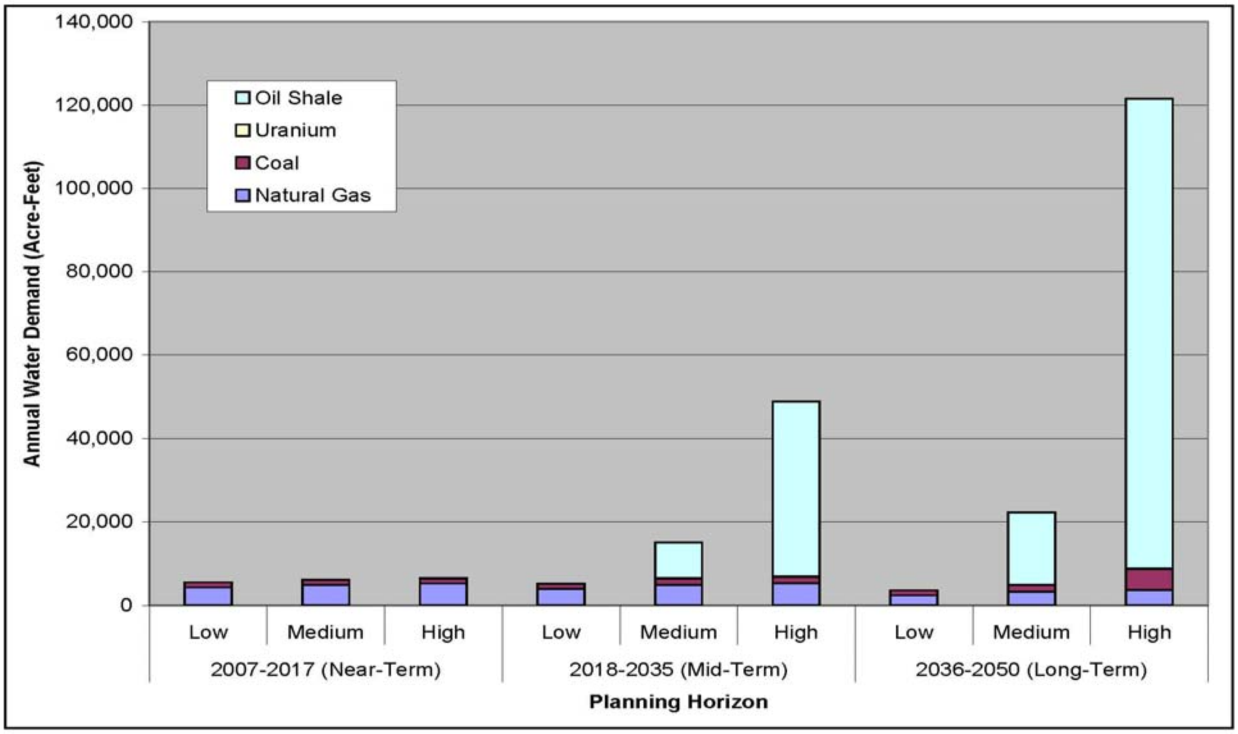
Three production scenarios (i.e., low, medium, and high) represent the three general production output criteria specific to each industry. The assumptions supporting the development of each of these energy production scenarios were based upon available published reports, empirical data, and personal communications with industry representatives and other professional groups (Personal Communications 2008). These production scenarios reflect the current documentation and research available for the four energy sectors. The scenarios provide a range that varies from a very limited production alternative (low production scenario) to an expanded production option that maximizes development (high production scenario).

- The low production scenario uses existing and available production information in the near-term planning horizon, increasing at a steady rate of development through the mid- and long-term planning horizons.
- An intermediate scenario, medium production, represents assumptions that are between the low and high production scenarios, incorporating some inherent limitations, such as the available direct electrical generation capacity, that are part of the energy extraction and development processes.
- The high production scenario is based upon forecasted maximum development assumptions cited by various sources and represents a level of maximum potential water demand in the study area.

Direct Water Demands

In general, direct water demands include the amount of fresh water needed for the construction, operation, production, and reclamation activities to support the energy extraction and development processes. Note that some of the extraction processes are net producers of water. Under the assumptions established for this study, the direct water demands for natural gas, coal, and uranium remain relatively stable under all three planning horizons and production scenarios (Figure ES-2, Summary of Direct Water Demands). Oil shale development, however, may increase current annual water demands from approximately 8,590 acre-feet per year in the medium production scenario and 42,100 acre-feet annually under the high production scenario during the mid-term[2].

Figure ES-2. Summary of Direct Water Demands



Indirect Water Demands

Indirect water uses include the water demands that result from an increase in population due to energy development and production. The number of workers needed under each planning horizon and the three production scenarios for each energy sector was compiled from information developed during the recent AGNC (BBC 2008) socioeconomic study. This study addresses three types of indirect water demands according to the following population categories:

- **Direct Workforce:** Workers directly employed by each of the energy sectors: natural gas, coal, uranium, and oil shale.

[2] For comparative purposes, the equivalent amount of water under the high production scenario for oil shale development would meet the net crop irrigation requirement for approximately 19,500 acres of alfalfa in Mesa County, Colorado.

- **Indirect Workforce:** Workers employed in services, trade, and other sectors whose jobs are supported by expenditures from energy sector firms and/or direct workforce employees and their households.
- **Energy-Related Population:** The combination of the direct workforce, the indirect workforce, and their families. The energy-related population and water demand projections described later in this section are incremental estimates of the total population and water demands specifically resulting from the development and production of each energy resource. For the purposes of this study, a unit value of 200 gallons per capita per day (gpcd) was used to estimate the indirect water demands and reflects the total water needs associated with the energy-related population, including their domestic use plus their per-capita share of the additional commercial and governmental water use arising from the energy-related population.

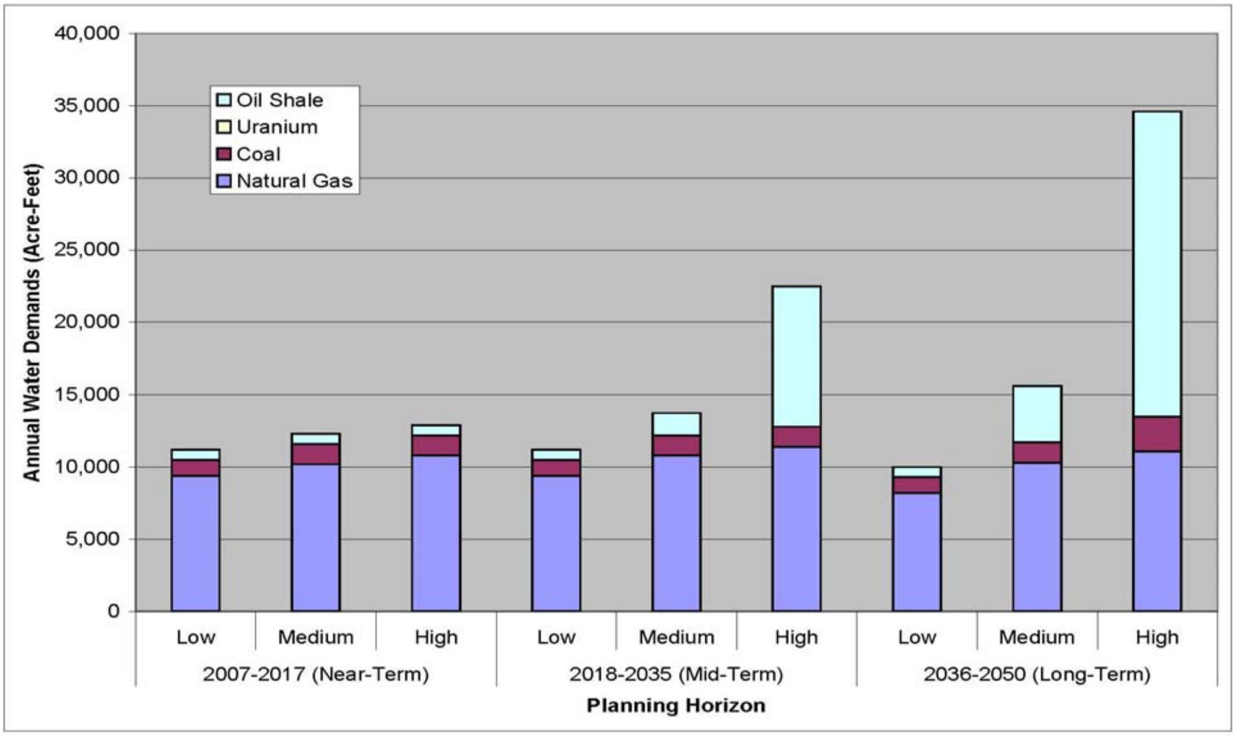
Under the assumptions developed for this study, the indirect water demands for natural gas and coal production are relatively stable for the three production scenarios and three planning horizons[3]. The indirect demands for oil shale show an increase under the high production scenarios for both the mid- and long-term planning horizons, which, as discussed below, is primarily attributable to the thermoelectric power generation requirements. Under the mid-term planning horizon, the indirect water demand for natural gas production is approximately 10,400 acre-feet per year (Figure ES-3, Summary of Indirect Water Demands). For comparison purposes, the average annual raw water supply delivered to the City of Grand Junction from 2005 through 2007 was 7,268 acre-feet.

Thermoelectric Power Demands

Each energy industry requires electric power to supply its production technologies. For the purposes of estimating water demands, it was assumed that thermoelectric power generation would accommodate this need. Thermoelectric power generation is a water-intensive process, and the amount of water needed to generate the electric power depends on the type of power generation facility. There are three primary energy resources that supply thermoelectric power

[3] The values depicted here also include the indirect demands that may occur as a result of additional population growth needed to support thermoelectric power generation.

Figure ES-3. Summary of Indirect Water Demands



generation facilities in the U.S., including coal, natural gas, and nuclear, accounting for 49.0, 20.0 and 19.4 percent of the total electric power net generation, respectively, in 2006 (EIA 2006a).

All four energy sectors studied in Phase 1 need electricity to support:

- The power required to the operate machinery, equipment, facilities, etc. associated with the extraction and production of the resource.
- The power required to sustain the resulting increase in municipal electrical demands from the direct and indirect worker populations.

Although other viable types of thermoelectric power generation facilities exist, such as nuclear and natural gas combined cycle plants, this study assumed that two coal-fired power plants[4] located within the study area (Craig and Hayden, Colorado) will provide the additional power to

[4] There are currently three coal-fired electric power generation plants located within the study area. They are located in Craig, Hayden, and Cameo, with net export capacities of approximately 1,300 megawatts (MW), 465 MW, and 77 MW, respectively. A recent Xcel Energy report (November 2007) reported that they will be retiring the Cameo power plant by 2010.

support the increase in electrical demand (recognizing that additional sources of thermoelectric power may be secured from sources outside of northwestern Colorado).

The water demands associated with thermoelectric power generation were estimated based upon a unit water demand of 0.48 gallons per kilowatt-hour (KWh), equivalent to the water demands at the Craig Power Plant. Figure ES-4, Summary of Thermoelectric Water Demands, provides a summary of the thermoelectric water demands estimated to support the development of the natural gas, coal, uranium, and oil shale industries for the three planning horizons and production scenarios.

The electric power demands, and therefore water demands, attributable to thermoelectric power generation remain relatively stable under all production scenarios and planning horizons for natural gas, coal, and uranium. However, the water demand associated with thermoelectric power generation to serve a potential oil shale[5] industry is significant. For example, the potential annual water demands estimated under the medium production scenario is 6,090 acre-feet per year in the mid-term and 26,316 acre-feet per year for the long-term planning horizon. Under the high production in the long-term, the water demand for thermoelectric generation to support oil shale extraction may be in excess of 240,000 acre-feet annually[6].

Summary of Water Demands

In summary, the greatest potential water demand among northwest Colorado energy resources is for the production of shale oil. The thermoelectric power needed for shale oil extraction is the largest source of potential water demand. Figure ES-5, Summary of Annual Total Water Demands, shows the cumulative water demands for natural gas, coal, uranium, and oil shale for direct, indirect, and thermoelectric power needs.

[5] The oil shale scenarios assume electric heating for the in-situ process. Not all processes intend to use electric power to heat and retort oil shale. Many processes intend to use the gas produced from the retorting of oil shale to provide the energy to heat and retort oil shale. Therefore, this study represents a conservative approach for oil shale thermoelectric demands.

[6] For context, the average annual streamflow recorded on the Yampa River near Maybell, Colorado, during the 10-year period 1998 through 2007 was approximately 953,000 acre-feet. During the same period, the average annual streamflow of the Colorado River at the Colorado-Utah state line was approximately 3.5 million acre-feet (USGS 2008).

Figure ES-4. Summary of Thermoelectric Water Demands

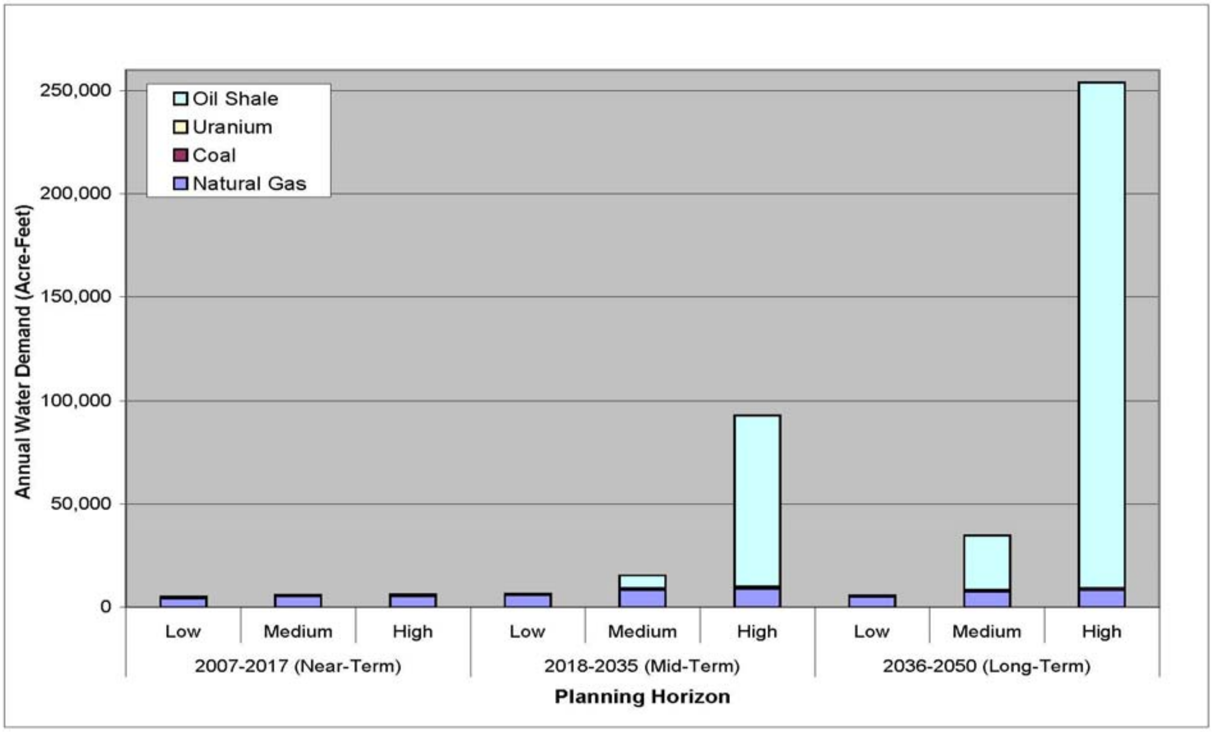
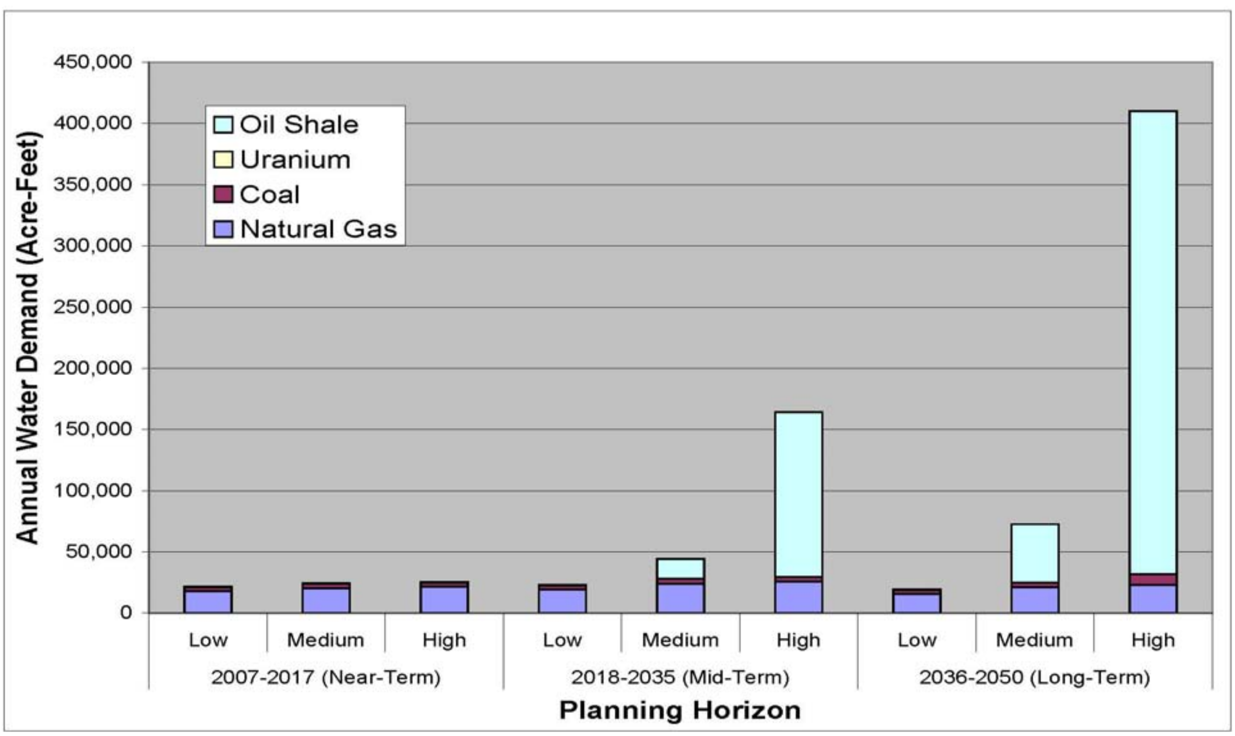


Figure ES-5. Summary of Annual Total Water Demands



Conditional Water Rights Review

As part of Phase 1, a review of existing conditional water rights was conducted for each of the water districts within the study area. This evaluation is a critical component of this investigation, because this information identifies the application of conditional water rights as a potential and viable source of water supply necessary to support energy development in the study area. The research performed as part of Phase 1 indicates that the majority of the existing energy production and development is occurring in Garfield County (Water Division 5) and is expected to shift north toward Rio Blanco County (Water Division 6) over time (BBC 2008).

Table ES-1, Summary of Conditional Water Rights, summarizes the conditional water rights as storage and diversion records, respectively, for each water district within the study area.

Table ES-1. Summary of Conditional Water Rights

Water District	Number of Direct Flow Water Rights	Total Conditional Direct Flow Rate (cfs)	Number of Conditional Storage Water Rights	Total Conditional Storage Volume (acre-feet)
Division 5, District 39	47	888	18	104,664
Division 5, District 45	8	118	1	2,000
Division 5, District 70	56	469	13	166,930
Division 5, District 72	8	513	3	176
Division 6, District 43	83	2,344	25	333,717
Totals	**202**	**4,332**	**60**	**607,487**

Notes:
cfs = cubic feet per second

For comparative and illustrative purposes, Table ES-2, Summary of Net Absolute Water Rights, summarizes the absolute direct flow and storage water rights for each water district. This table includes the total number of absolute water rights and net amount of water adjudicated to each structure. Further, the number and net quantity of water rights with decreed beneficial uses such as commercial, industrial, and power are depicted in parenthesis. It is interesting to note the total amount of conditional direct flow water rights is 4,332 cubic feet per second (cfs) versus 16,588 cfs of decreed absolute water rights. This reflects the typical early development of ditches, canals, and other streamflow diversions to meet early domestic and irrigation development in Colorado. In contrast, the 607,487 acre-feet of conditional storage water rights far exceeds the 146,355 acre-feet of absolute storage water rights.

Table ES-2. Summary of Net Absolute Water Rights (including both the Total Number and Energy Portion of the Total, in parentheses).

Water District	Number of Total Absolute Direct Flow Rights	Total Absolute Direct Flow Rate (cfs)	Number of Absolute Storage Water Rights	Total Absolute Storage Volume (acre-feet)
Division 5, District 39	1,465 (157)	1,765 (173)	91 (43)	35,700 (13,077)
Division 5, District 45	1,125 (61)	1,618 (103)	123 (31)	2,381 (717)
Division 5, District 70	454 (76)	461 (12)	10 (7)	49 (5)
Division 5, District 72	1,555 (131)	8,321 (2,911)	481 (99)	78,182 (49,854)
Division 6, District 43	2,734 (151)	4,423 (1,196)	336 (42)	30,043 (17,994)
Totals	**7,333 (576)** **≈8% of the Total are Energy Related**	**16,588 (4,395)** **≈26% of the Total are Energy Related**	**1,041 (222)** **≈21% of the Total are Energy Related**	**146,355 (81,646)** **≈56% of the Total are Energy Related**

Notes:
≈ = approximately
% = percent
cfs = cubic feet per second

Follow-on phases of this study (i.e., Phase 2) will require the review and compilation of the conditional water rights for the Colorado, Yampa, and White Rivers that can be applied toward energy development. Through an exhaustive research of the conditional water rights within these river systems, including interviews with water administration officials, it is anticipated the majority of the conditional water rights to support energy development will come from the Colorado and White River Basins. These conditional water rights, if developed, have the potential to impact existing water rights in these river basins because their respective diversion or storage water rights will be administered in priority of their adjudication date. This date reflects the first recognizable action that formed the intent of the appropriator to secure a water right. This administrative priority date for a conditional water right is earlier or “senior” to the time when water is first applied to beneficial use or when the conditional water right is perfected to absolute status through judicial confirmation. The potential impact to existing water rights would occur to those absolute water rights that were adjudicated *after* the subject conditional water rights were awarded their priority date in a preceding court decree. It is plausible that, should a sufficient number of conditional water rights perfect their decrees to absolute status through diversion/storage to beneficial use, the historic river call regime on individual tributary streams and the Colorado River system may be extended in duration and the historic administrative priority may be shifted to require curtailment of water rights that previously were not subject to water administrative actions. Significant development of conditional water rights may also impact water delivery and administrative actions that are subject to interstate compliance under the Colorado River Compact (1922) and Upper Colorado River Compact (1948).

Recommendations and Conclusions

Overall, the results from the Phase 1 evaluation will assist with further development of the grant objectives in Phase 2, specifically exploring the various alternatives to identify and quantify reliable water supplies to meet the energy sector's increasing water demands.

Oil shale development, along with the associated power production, could require tremendous amounts of water, up to 378,300 acre-feet annually. Additional conclusions that can be drawn as a result of Phase 1 of this study include:

- The amount of water required for natural gas, coal, and uranium, including the amount associated with population growth to support these industries, is significant but appears to be within the realm of water supplies available for planning and development.
- The amount of power generation needed to serve the oil shale industry in the long-term and high production scenario, including the amount associated with population growth, could be extremely high, approximately 19,000 megawatts (MW) of capacity, more than 14 times the size of the largest power plant in Colorado (Craig Station).
- The indirect water needs for oil shale development could exceed the direct water demands, assuming thermoelectric power would be supplied by coal-fired power plants in the study area. These demands could be reduced by approximately two-thirds if natural gas-fired generation facilities were used. Water demands could more than double if they were met using nuclear power facilities.
- Many industries located in the study area have extensive portfolios of conditional water rights, many of which are senior to existing absolute water rights. Development and perfection of conditional water rights could require administrative curtailment of junior absolute water rights and their application to existing beneficial uses of water.

It is recommended that Phase 2 be implemented, addressing potential sources of water supply and including new water projects, if needed, to meet the water demands forecasted in Phase 1. It is also recommended that Phase 2 quantify the net consumptive use of water supplies contemplated for use in the energy sectors, including addressing the timing, location, and magnitude of return flows resulting from water use attributable to energy development. This action is recommended in order to estimate the effects that energy development may have on vested water rights and in-stream flows. In addition to integration of the conclusions from Phase 1, Phase 2 should incorporate findings and conclusions available from parallel investigative studies such as SWSI, or serve to provide data and information for the pending Colorado Water Availability Study.

1.1 BACKGROUND

Recent studies have indicated that the Green River Formation in Western Colorado may contain approximately 1.5 to 1.8 trillion barrels (bbl) of recoverable oil from shale (as represented by the combined gas and kerogen British thermal unit [Btu] equivalent [Andrews 2006]). This resource, in addition to the other forms of available energy in western Colorado such as natural gas, coal, uranium and crude oil, contribute to the potential for large increases in energy development in this region. The global demand for these energy resources is increasing, and the natural resources available in the Green River Formation are vast and relatively untapped; specifically in the study area. Capture of these energy resources is dependent upon securing an adequate source of water supply to support the extraction and processing of the resources. “Energy development” includes the following interrelated activities: extraction and development of natural gas, coal, oil shale, uranium, and thermoelectric power; municipal demands resulting from the ancillary need to provide water for the direct and indirect increases in energy-related employment and population growth tied to these industries; and the thermoelectric power needed to serve these energy extraction industries and population influx. The amount of water demand varies among each energy sector and is highly dependent upon their extraction and production techniques.

The study area is defined as that geographic region in northwestern Colorado defined specifically as the Yampa, White, and portions of the Colorado river basins, as portrayed in Figure ES-1, Study Area.

The most active energy resources in the study area today include the natural gas, coal, and thermoelectric power industries. According to the Colorado Department of Local Affairs (DOLA) and Associated Governments of Northwest Colorado (AGNC) Socioeconomic Study (BBC 2008), there were about 7,400 direct jobs in energy and natural resources across the four-county region (Moffat, Rio Blanco, Garfield, and Mesa) in 2006. These jobs represent almost 12 percent of all direct basic employment in northwest Colorado. Currently, this sector is dominated by natural gas exploration and production, with gas-related activity accounting for about 6,300 of the 7,400 energy and natural resource jobs. Coal mining and electric generation accounted for the most of the remaining jobs in this economic base component (BBC 2008).

Two Roundtables (Colorado; Yampa/White), created as part of House Bill (HB) 05-1177 (State of Colorado 2005), identified the need to assess the quantity of water needed to support the development of the available energy resources within the Colorado, Yampa, and White river basins. These two Basin Roundtables applied for funding through the "1177 Roundtable process" to support this study (Energy Development Water Needs Assessment), which will serve to provide critical and necessary information to assist state and local water supply, planning, and development agencies in the review and evaluation of the range of water supply hydrologic impacts of energy development. The URS Corporation (URS) team was retained to provide professional services to complete Phase 1 of this grant study (as outlined in the October 19, 2007 scope of work between the Energy Subcommittee and URS).

This water needs assessment represents the foundational step in prescient water supply planning, development, and management activities within the state of Colorado that revolve around energy production development. The study accomplished this intent by defining a range of scenarios to support the analysis of water demands for potential development in four energy sectors and water planning in three time horizons. The *future* implications of energy development and their related technology for development are unknown. However, based on the current state of empirical evidence and knowledge, the potential for increased energy production in northwestern Colorado is strong.

Inherent within the water planning process is recognition that physical and legal parameters form the requisite twin pillars for securing a firm and reliable water supply. The technical analysis to address the legal supply of water available for potential energy production includes, but is not limited to:

- A comprehensive review of adjudicated absolute and conditional water rights (direct flow and storage water rights) in perspective of location, priority, amount, and decreed beneficial use(s) of water.
- The amount of water historically diverted/stored for application to beneficial use.
- The intrastate "river call" history on all tributary streams within the study area.
- Potential impacts under the Colorado River Compact (1922) and Upper Colorado River Compact (1948).

In addition to the water demand estimates, this needs assessment also begins the process of addressing the legal parameter through compilation of conditional water rights within the study area that may be applied to additional energy production. Although further technical analysis is necessary to fully address the legal water supply parameter, the other aforementioned issues are beyond the scope of this study and warrant thoughtful and thorough consideration in subsequent investigations.

1.1.1 Recent Documentation

Several documents, articles, and research studies have been written/conducted to assess various individual components for identifying the water needs for energy production development; however, none have attempted to put scenarios into a usable tool for planning purposes. Important recent and concurrent studies related to this project are briefly described below.

- The Statewide Water Supply Initiative (SWSI) Phase I and Phase II reports quantified the demands and allocations for water in Colorado. While the SWSI identified future energy-related water demands in the basins, estimates to provide strong substantiation under various demand scenarios are not available, and SWSI did not examine in detail the water needed to produce and extract energy resources. Phase II recognized that the development of energy resources in Colorado has increased over the last several years and is likely to increase further if fuel costs remain high. This activity may result in water quality issues and other impacts that will need to be addressed through water quality programs such as the Colorado River Salinity Control Program (CWCB 2004, CWCB 2007).
- The U.S. Department of Interior (DOI), U.S. Bureau of Land Management (BLM) Draft Programmatic Environmental Impact Statement (PEIS) proposes to amend 12 land use plans to describe the most geologically prospective areas administered by the BLM where oil shale and tar sands resources are present, and to designate which of these areas will be open for application for commercial leasing, exploration, and development. There are approximately 2.3 million acres of BLM-administered lands within this area that are the subject of the Draft PEIS. The Draft PEIS considered three alternatives and selected Alternative B as the Preferred Alternative. The Preferred Alternative would make approximately 2 million acres of lands containing oil shale resources available for application for commercial leasing and approximately 430,000 acres available for tar sands. Alternative A, the No Action

alternative, would not amend land use plans to identify lands as available for application for lease. Alternative C, which is similar to the BLM Preferred Alternative, would amend land use plans to identify areas available for application for lease but would make approximately 830,000 acres containing oil shale resources available for application for commercial leasing and approximately 230,000 acres available for tar sands. The Draft PEIS addressed the direct, indirect, and cumulative environmental, cultural, and socioeconomic impacts of the three alternatives. While the BLM has determined that there are no environmental impacts associated with the actual amendment of land use plans, it intends to establish a commercial leasing program to facilitate future development and has included a programmatic-level analysis of the potential impact of oil shale and tar sand development technologies as they are currently known. One of the limitations of the Draft PEIS is that it does not provide an assessment of the cumulative impacts of multiple types of energy development in other sectors and therefore does not quantify the resulting water demands (BLM 2007b). The BLM Draft PEIS did not specifically forecast production levels but did provide analyses of the effects associated with 50,000 barrels per day (bpd) production from surface and underground mining as well as 200,000 bpd from in-situ.

- The Colorado Water Conservation Board (CWCB) is conducting the Colorado River Water Availability Study in an effort to estimate the amount of water available to Colorado under the 1922 and 1948 Compacts. This study is ongoing and will be able to use information gleaned from the Energy Development Water Needs Assessment for further refinement of water demands as they relate to energy development for natural gas, coal, uranium, thermoelectric power generation, and oil shale in northwest Colorado.

- The Colorado DOLA and AGNC retained BBC Research & Consulting (BBC) to develop a predictive economic projection model that would capture the complex interplay of socioeconomic forces in northwest Colorado and provide projections of employment, population, and community fiscal impacts under varying assumptions about economic expansion in the area's basic industries (BBC 2008). The model used in this study was custom built, incorporating IMPLAN, an economic input-output originally developed for the U.S. Forest Service and now maintained by Minnesota IMPLAN Group, to estimate secondary economic impacts from direct activities in the energy industries and other economic base activities in the study region. Results from the AGNC model tie into the State Demographer's demographic model to estimate population changes. This study provides a good basis for populating the direct and indirect population growths for the various planning and production scenarios developed as part of this project.

1.2 INTRODUCTION

Completion of Phase 1, through compilation, analysis, and submittal of this needs assessment report, has successfully defined a set of scenarios for near-, moderate-, and long-term planning horizons with low, medium, and high production conditions. This assessment and report establishes the necessary foundation for continued investigation in a future Phase 2 analysis, which would determine the source of water supply to meet energy production demands. This report summarizes the results of Phase 1 of the Energy Development Water Needs Assessment project and is organized into the following major sections:

- Planning Horizons and Production Scenarios
- Direct Water Demands
- Indirect Water Demands
- Thermoelectric Power Water Demands
- Conditional Water Rights Review
- Recommendations and Conclusions

The intent of this report was to research existing and available information and reports to support the assumptions behind the planning horizons and production scenarios, recognizing the presence of various technologies for the energy sectors. The information and data reviewed during this comprehensive literature review were applied, in conjunction with sound engineering principles and professional experience, to document major findings relevant to energy production and formulation of the recommendations provided at the conclusion of this assessment. This report documents relevant information from a number of studies but does not attempt to comprehensively summarize each document reviewed.

1.2.1 Study Area

The study area for this project includes the area in northwestern Colorado most influenced by emerging and prospective energy development. Because this report focuses on water, the boundaries established for the study are consistent with portions of the Colorado, Yampa, and White river basin boundaries (Figure ES-1). This area encompasses much of the Colorado, Yampa, and White river watersheds in Routt, Moffat, Garfield, and Rio Blanco counties, including small portions of Mesa, Eagle, and Gunnison counties.

1.2.2 Major Energy Industries

The energy development processes represented in this report are consistent with the active major energy industries developing in the study area. The energy industries discussed include: natural gas, coal mining, uranium mining, and oil shale and include thermoelectric power generations necessary to serve the direct and indirect electric demands of the four industries.

2.1 PLANNING HORIZONS

Three planning horizons were established for this study: near-term (2007-2017), mid-term (2018-2035), and long-term (2036-2050). The timeframes assigned to each of these planning horizons were based primarily on the timelines established for similar water and energy studies in Colorado. The near-term planning horizon (2007-2017) builds upon existing natural gas data for 2007 and continues through 2017, a 10-year timeframe that coincides with the end of the 10-year Research Development and Demonstration (RD&D) Oil Shale Leases[7] and that is consistent with the timeframes and data cited in the AGNC Study (BBC 2008) for natural gas development in portions of the study area. The mid-term planning horizon (2018-2035) was established to be consistent with the end of the AGNC Study and similar to the planning horizon in the SWSI Report at 2030, within 5 years of the end of the mid-term planning horizon. The long-term planning horizon (2036 and beyond) recognizes that energy development activity in the study area may continue beyond the next 27 years, with no certain endpoint. For purposes of this study, 2050 is the endpoint of the long-term planning horizon.

2.2 PRODUCTION SCENARIOS

This study assumes three production scenarios to represent the water demands for each of the major energy industries under three general production output criteria: low, medium, and high production, that represent full energy production. The production scenarios established for this study are bounded by limited production on one end (low production scenario), and expanded production that maximizes development on the other (high production scenario). The low production scenario uses existing and available production information for the near-term planning horizon and increases over time through the mid- and long-term planning horizons at a relatively steady rate of development. An intermediate scenario, medium production, is also provided and represents assumptions that are between the low and high production scenarios and energy extraction and development processes. The high production scenario is based upon forecasted maximum development assumptions in available reports and documents for the

[7] Five RD&D leases have been issued in the Piceance Basin of Colorado (one each awarded to Chevron Shale Oil Company and EGL Resources, Inc., and three awarded to Shell Frontier Oil & Gas); one RD&D lease has been issued in the Uinta Basin, Utah (awarded to OSEC), outside the study area (BLM 2006a-2006c).

various energy industries and represents a level of maximum potential water demand in the study area.

This section of the report summarizes the direct water demands for the natural gas, coal, uranium, and oil shale industries. Indirect demands and the demands associated with thermoelectric power generation are discussed in Section 4, Indirect Water Demands, and Section 5, Thermoelectric Power Demands. As part of the direct demand discussions in this section, the background, primary sources of information and limitations for each energy sector are provided, as this information was integral in estimating the direct water demands.

In general, direct water demands include the water required for the construction, operation, production, and reclamation needed to support the energy extraction and development processes.

3.1 NATURAL GAS

Recent documentation states that natural gas is an integral source of energy in the U.S., as it supplies approximately 25 percent of the nation's energy consumption (DOE 2003). In 2001, total natural gas consumption represented 3 percent of transportation, 40 percent of commercial, 45 percent of residential, 36 percent of industrial, and 14 percent of power generation energy use. The restructuring of electricity markets, combined with the growing public aversion to burning high carbon content fossil fuels, will likely promote the already growing natural gas production industry. Abundant domestic supply also places natural gas at the forefront of viable energy sources to develop while moving toward energy independence. Furthermore, it is thought by many that natural gas may be the energy source capable of bridging the gap between the current energy economy and that which may power our economy into the sustainable fuels of later decades (NPC 1999). Possible evidence of this was seen in 2007, when natural gas consumption increased for the first time since 2004 to 23 trillion cubic feet (Tcf)[8]. All sectors (residential, commercial, industrial, and electric power generation) experienced an increase in consumption. Of note was the increase in consumption attributable to electric power generation, which grew by 9.9 percent from the previous year. This increase was due to construction of natural gas-fired power plants as well as an increase in natural gas use by dual-fired power plants, which can use both coal and natural gas resources (EIA 2008).

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[8]Natural gas is generally priced and sold in units of a thousand cubic feet or *Mcf*. Units of a trillion cubic feet or *Tcf* are often used to measure large quantities, as in resources or reserves in the ground or annual national energy consumption. A Tcf is one billion Mcf.

Natural gas resources in the Rocky Mountain region (Montana, Wyoming, Utah, Colorado, and Utah) are primarily found in unconventional[9] "tight-gas" and coal bed natural gas formations that present special challenges during production. Technological advances in directional drilling and hydraulic fracturing of deep rock formations to create pathways to release gas to the well bore, also called *frac'ing*, have given rise to natural gas production growth in the western Colorado region. As sources of conventional (available based on current technology) natural gas reserves become depleted and scarce, unconventional sources will need to be developed (DOE 2003). Onshore production from unconventional formations is projected to increase by 50 percent, from 4.4 Tcf in 1998 to almost 7 Tcf in 2010, with much of it coming from the Rocky Mountain region (NPC 1999). The transition from conventional to unconventional production is apparent based on the total number of rigs drilling "horizontal wells," a form of directional drilling. In the late 1990s, about 40 drilling rigs, or 6 percent, were drilling horizontally. As of May 2008, the number had grown to 519 rigs, or 28 percent of the total in the Rocky Mountain Region (EIA 2008).

3.1.1 Natural Gas Background

Natural gas is the most dynamic energy industry within the study area and perhaps within the state of Colorado at the present time. Growth in production can only be sustained by new well development, supported by continued exploration. This often requires leasing of federally owned mineral rights and negotiations with surface landowners, both government and private, to develop new resources. Natural gas technology has also been changing and has steadily increased industry exploration and production capabilities over the last decade. In 2002, a large scale "gas boom" began within the study region. New technology, rising demand, and rising prices for natural gas have made northwest Colorado an attractive opportunity for national energy development companies such as Williams, Encana, ExxonMobil, ConocoPhillips, Noble, and Chevron, as well as a host of smaller companies operating because of high prices.

[9] Unconventional resources are those resources that due to either the location and/or geological setting are less economical to develop as compared to conventional resources.

Until recently the majority of gas activity in western Colorado was limited to the Rangely Field located in western Rio Blanco County (See Figure 3-1, Natural Gas Resources). Currently, the Williams Fork Formation[10] is the primary geologic formation producing natural gas within the study area. Drilling into this formation has thus far taken place primarily around the edges of the Piceance Basin, where the depth below ground surface (bgs) to the Williams Fork Formation is shallowest. Depending on the location, wells targeting the Williams Fork Formation range from 4,000 to 10,000 feet bgs. Natural gas reserves within the formation are in the form of lenticular[11] deposits surrounded by impermeable sandstone and/or shales. These reserves can now be feasibly reached and extracted due to the aforementioned advances in directional drilling and frac'ing technologies.

The number of gas wells drilled in the study area increased rapidly, from 2,245 in 2003 to approximately 6,100 in 2006 (COGCC 2008). While the total number of wells drilled in 2007 was not released at the time of this study, it appears that 2007 activity occurred at roughly the same level as 2006, with a temporary slowdown in growth, primarily due to the lack of pipeline capacity and a corresponding drop in prices for Colorado natural gas (Daily Sentinel 2007). With the completion of a 192-mile segment of the Rockies Express Pipeline[12] in February of 2007, pipeline capacity out of the study area now appears to be adequate to support this natural gas development.

3.1.2 Natural Gas Primary Sources of Information

The following information sources were used for developing the production scenarios for natural gas:

- AGNC Northwest Colorado Socioeconomic Analysis and Forecasts conducted by BBC Research and Consulting (BBC 2008)

[10] The Williams Fork Formation is part of a larger geologic group of formations known as the Mesa Verde Group. The upper formations of the Mesa Verde Group produce natural gas sourced primarily by coal and other organic-rich (carbonaceous) strata (USGS 2003).
[11] Lens-like in shape.
[12] The 192-mile segment connects the Meeker Hub near Meeker, Colorado, with the Cheyenne Hub in Weld County, Colorado. The Rockies Express Pipeline, when completed, will connect production in the study area with consumers as far away as Ohio. The project is being anchored by long-term, firm transportation contracts with a number of shippers for virtually all of the 1.8 Bcf per day of available capacity on REX (Kinder Morgan 2008).

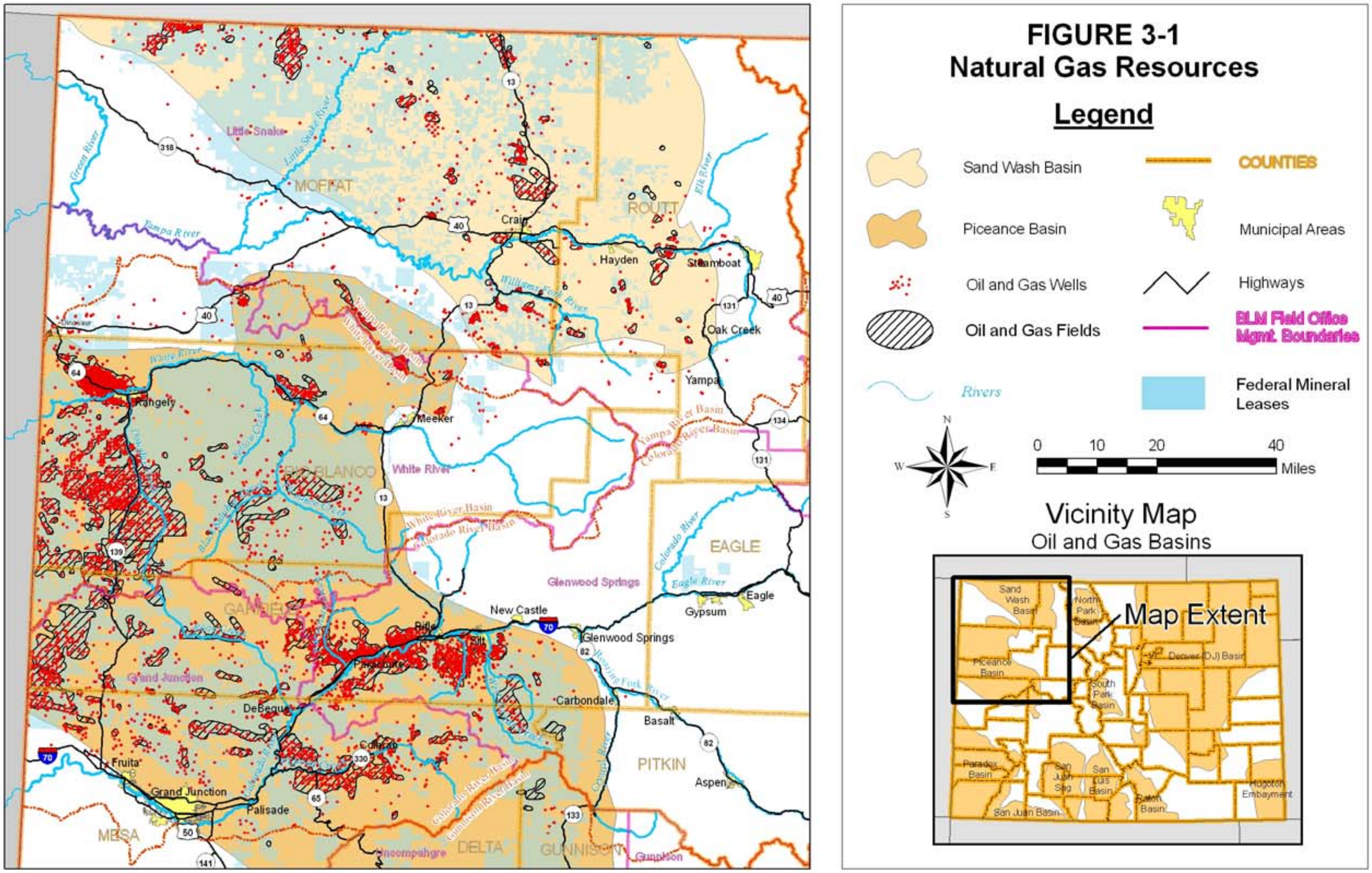


FIGURE 3-1
Natural Gas Resources

- BLM's White River Resource Management Plan Amendment Environmental Impact Statement (EIS) (BLM 1996)
- BLM's Reasonably Foreseeable Development Scenario (RFDS) for the White River Field Office (WRFO) (BLM 2007b)
- Interviews with industry representatives (conducted both by the URS and AGNC teams) (Personal Communications 2008)

The AGNC study combined information from interviews (in 2006) with data from Garfield County natural gas operators. During the 2006 interviews conducted as part of the AGNC study, industry sources suggested that over the next two decades, the focus on drilling activity would gradually shift northward from Garfield County into Rio Blanco County. The general view is that drilling will continue at a fairly consistent rate of about 1,000 new wells per year (in Garfield County) over the next 10 to 15 years. Given about 3,900 wells at present, this equates to approximately 15,000 to 20,000 wells in Garfield County by 2023.

In 2007, the BLM released the RFDS for the WRFO management area projecting natural gas activity within those portions of Garfield, Rio Blanco, and Moffat Counties encompassed by the WRFO management area. As shown in Figure 3-1 the WRFO primarily encompasses Rio Blanco County. BLM's RFDS forecasts a steady increase in the rate of drilling to nearly 1,400 new wells per year by 2027 within Rio Blanco County with the completion of approximately 17,000 wells within the WRFO management area (i.e., Rio Blanco County) area by 2027.

The AGNC Study forecasts much less drilling in Moffat County. This is attributable to the larger gas reserves known to be present in the Piceance Basin to the south of Moffat County. Garfield and Rio Blanco Counties encompass the majority of the Piceance Basin extents within Colorado. Gas production in Moffat County is primarily sourced by the Sand Wash Basin located in Colorado and Wyoming. At the time of this study, natural gas production from the Sand Wash Basin located within the study area is much less than that of the Piceance Basin.

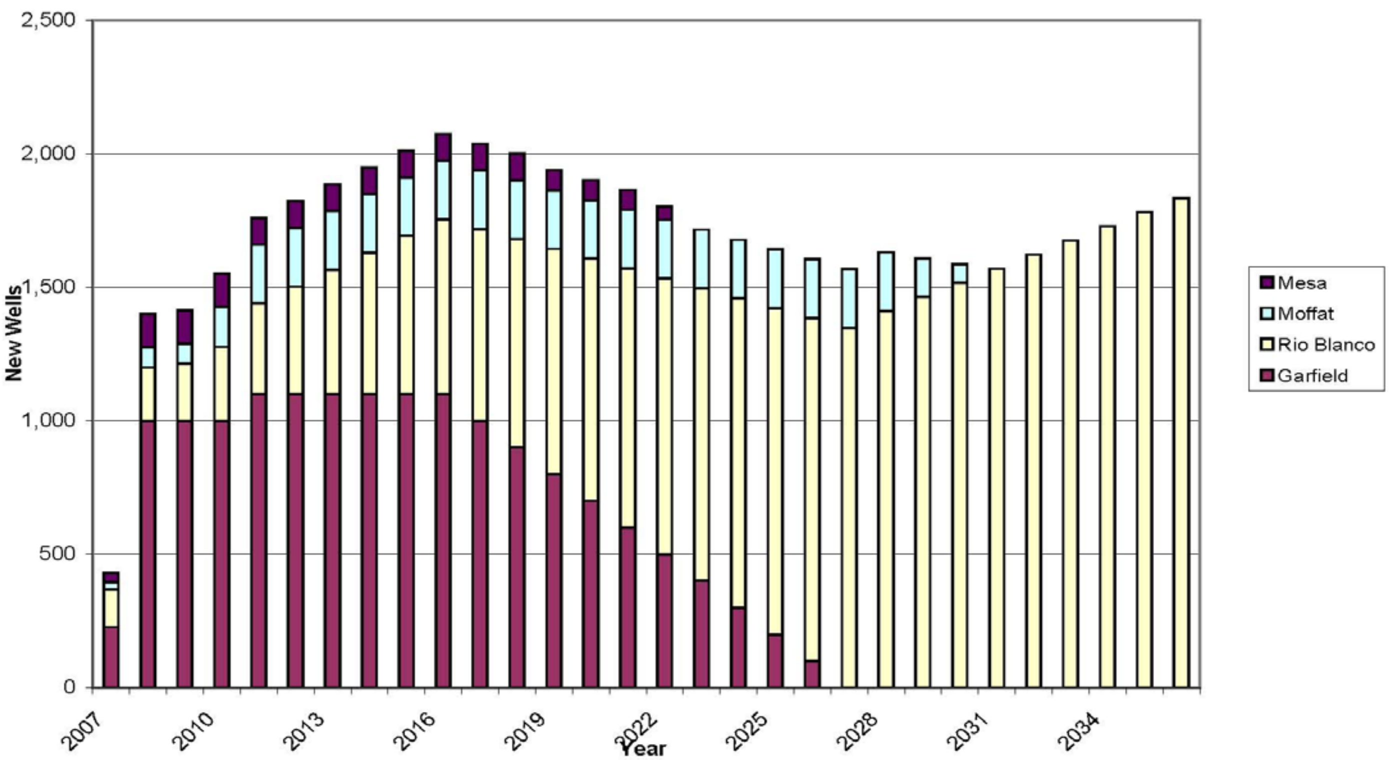
3.1.3 Natural Gas Production Scenarios

The production scenarios for natural gas were based on the projections made in the AGNC Study. Figure 3-2, Projected Annual Gas Well Drilling (BBC 2008), depicts the projected number of wells to be drilled in the study area on an annual basis from 2007 to 2035, by county as presented in the AGNC Study (BBC 2008) (Exhibit III-1). Based on production data from the Colorado Oil and Gas Conservation Commission (COGCC), it was assumed that 6,100 wells are currently producing within the study area. Approximately 50,000 new wells are anticipated to be drilled in the study area over a 29-year period.

3.1.3.1 Natural Gas Low Production Scenario

Drilling rates for the low production scenario are based on the number of wells provided in the AGNC Study for 2006, which are approximately 1,800 wells. The drilling rates for the low production scenario are consistent with those estimated in the AGNC Study as shown in Figure 3-2. The low scenario is intended to be representative of current natural gas industry activity in the study area combined with the best known drilling forecasts.

Figure 3-2. Projected Annual Gas Well Drilling (BBC 2008)



3.1.3.2 Natural Gas Medium Production Scenario

Production rates for the medium scenario assume that an additional 7,500 wells will be drilled in Moffat County for the mid-term planning horizon. The basis for this assumption is that natural gas demand will exceed forecasts and therefore increase prices, enticing private landowners to sell assets or negotiate with natural gas industry companies (BBC 2008). It is assumed that these drilling activities will occur on the private lands generally located between Highways 64 and 40 in southeastern Moffat County. Slightly higher production rates (than the low production scenario) were also assumed for the near and long-term planning horizons medium production scenario.

3.1.3.3 Natural Gas High Production Scenario

Production rates for the high production scenario assume drilling rates slightly higher than the medium production scenario. The increase in drilling rates for this scenario is due primarily to an increase in natural gas demand. While national economic forces will continue to influence the demand for natural gas, the high production scenario takes into account the demand for more thermoelectric power generation needs[13] as a result of the oil shale industry activities within the study area. Estimates pertaining to the total gas in place (GIP) in the study area (100 Tcf) appear to be adequate[14] to sustain the high production scenario. Table 3-1, Assumptions Supporting the Natural Gas Production Scenarios, summarizes the assumptions for all three production scenarios and planning horizons.

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[13] The start-up of an oil shale industry could drastically increase electrical demands in the event that the downhole heating associated with in-situ oil shale retort is accommodated by electrical heaters. Thermoelectric power generation facilities using natural gas could supply this demand.

[14] Applying the median estimated ultimate recovery (EUR) rate of 0.5 Bcf per well produced during the lifetime of a typical well (USGS 2003) completed in the Mesa Verde Formation to the annual totals of producing wells, the total volume of natural gas produced by 2050 will be approximately 40 Tcf under the High Production Scenario. According to BLM’s RFDS, the total GIP present in the Study Area is approximately 100 Tcf.

Table 3-1. Assumptions Supporting the Natural Gas Production Scenarios

Planning Horizon	Production Scenarios		
	Low(1)	Medium	High
Near-Term (2007–2017)	Average Drilling Rate ≈1,800 wells/year	Average Drilling Rate ≈1,900 wells/year	Average Drilling Rate ≈2,000 wells/year
Mid-Term (2018–2035)	Average drilling rate ≈1,700 wells/year. Drilling activity slowly declines in Garfield County and shifts to Rio Blanco County.	Average drilling rate ≈2,125 wells/year to account for additional activity in the northern Piceance Basin. ≈65,000 operational wells by 2035.	Average drilling rate ≈2,300 wells/year to provide thermoelectric power to the oil shale industry for start-up.
Long-Term (2036–2050)	Drilling activity slowly declines to ≈ 1,100 wells/year by 2050.	Drilling activity slowly declines to ≈ 1,500 wells/year by 2050.	Drilling activity slowly declines to ≈ 1,700 wells/year by 2050.

Notes:
(1)Based on AGNC study Exhibit III-1 (BBC 2008).
≈ = approximately

3.1.4 Natural Gas Direct Water Demands

There are two types of direct water demands associated with natural gas exploration and production:

1. **Drilling Operations –** The majority of direct water demands associated with natural gas are associated with the drilling operations; hence the resulting water demand is directly proportional to the number of wells drilled. Drilling operation demands are a one-time demand resulting from well drilling, completion and the construction of haul roads, well pads, and facilities. These demands are only present if industries continue to explore and develop new areas for production.

2. **Pipeline Transmission and Treatment Operations –** Once a well is completed subsequent water demands are almost entirely associated with electrical power generation needed to supply the electrical demands required to operate natural gas treatment facilities and pipeline compressor stations. These demands will persist throughout the production cycle of a well which can last up to 50 years (BLM 2007b) for highly productive wells[15], however,

[15] Well production rates and lifetime vary. Total production for typical wells in the Study Area ranges from 0.5 Bcf (USGS 2003) to 3.2 Bcf (BLM 2007b).

assuming a 15 percent annual decline in production (RMAG 2003, BLM 2007b), 96 percent of production occurs within 20 years. For the purposes of this study, an "effective" production life of 20 years was assumed, during which 0.5 billion cubic feet (Bcf)[16] of gas will be produced.

3.1.4.1 Drilling Operations

The direct water demands associated with drilling operations can be broken down further into the following phases:

- **Construction of Well Pads and Support Facilities –** The amount of water needed for the construction of the well pad, haul roads, pipelines, and compressor stations is highly dependent on the site specific conditions, such as topography and soil. Direct water demands during construction typically include the water needed to obtain optimal soil density and dust suppression. The water needed during construction of pipelines, including hydrostatic pressure testing, was assumed to be negligible[17]. Based on the Environmental Assessment for the Piceance Development Project submitted by ExxonMobil in 2007, construction water requirements on a per well basis are only 0.05 acre-feet per well[18] (ExxonMobil 2007).
- **Drilling –** A fluid, in some cases fresh water, is used during the drilling of production wells to create a "mud". This is used for the: removal of cuttings from the well, controlling formation pressure, sealing of formations, and cooling and lubrication of the drill bit. Interviews with industry operators revealed a range of 0.25 to 0.65 acre-feet of a fluid per well for this process. Produced water[19] is typically not used for this process as the high chloride content can cause the mud to coagulate causing problems with recirculation of the mud. For purposes of this study it was assumed that 0.25 acre-feet of water per well was needed for drilling.

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[16] The median production volume of a well completed in the Mesa Verde Formation, according to the USGS (2003).

[17] Hydrostatic pressure testing requires filling segments of pipelines (ranging from 6-inch local transmission lines to 42-inch-diameter regional transmission lines) with water and subsequent pressurizing to test the integrity of the pipeline. This is typically a one-time water demand that occurs immediately after construction of a pipeline segment. Other available pipeline testing methods use compressed gas such as nitrogen.

[18] 46 acre-feet for 120 well pads containing 1,080 wells.

[19] In addition to natural gas, production wells also produce liquid natural gas condensate and water. Produced water is typically of a low quality and is disposed of by either transporting it off-site to a treatment facility or in some instances placed in evaporation ponds where it is evaporated. Produced water is often used for frac'ing as good water quality is not needed for this process.

- **Frac'ing –** This process involves injecting fluid containing proppants (typically sand) at a high pressure to create small fractures in the impermeable shales and/or sandstones surrounding the well. Much of this fluid returns to the well leaving behind the proppants which serve to "prop" open the fractures. These fractures create pathways to the well for the gas to travel, connecting the well bore with the network of existing fractures. This process increases the production rate of wells present in tight gas formations. For each well (zone) approximately 2,500 bbl of water are used during the frac'ing process. Each well can have up to 10 zones corresponding to a total water demand of 25,000 bbl (Rollenhagen et al. n.d.), or 3.20 acre-feet per well. In some cases all of the water used in frac'ing can be recycled to be used again for frac'ing. Produced water can also be used for frac'ing but typically requires treatment. Based on interviews with industry operators, recycled frac' water must be "cut"[20] every 3 to 6 months in order to reduce the concentration of chemicals that may inhibit the viscosity or other characteristics of frac' water. For purposes of this study, 1.5 acre-feet of fresh water per well is needed for frac'ing.
- **Dust Suppression –** Land use permits needed for natural gas drilling typically require dust suppression to contain or limit dust created by associated vehicular travel. Based on interviews with water hauling companies in the study area, the water needed for dust suppression activities is approximately 65 bbl per mile (Personal Communications 2008). Based on the road layout of active natural gas fields it was determined that approximately 0.1 miles of road are constructed per well. During a 180-day drilling season, it was reasonable to assume two applications per day. As a result approximately 0.30 acre-feet per well is applied annually for dust suppression. This was applied to the total number of new wells drilled each year in each production scenario as the majority of dust suppression is associated with the high vehicle traffic experienced on access roads to well pads during the drilling of wells. Dust suppression related to completed wells that are in the production phase is assumed to be negligible.

[20] Adding fresh water in an amount approximately equal to that of the frac' water.

3.1.4.2 Pipeline Transmission and Treatment Operations

The direct water demands associated with pipeline transmission and treatment operations are directly related to the volume of natural gas produced. These demands include:

- **Pipeline Operations –** No direct water demands are associated with pipeline operations. Compressor stations are used to transmit natural gas though pipelines incurring an electric demand. Water demands associated with thermoelectric power generation are discussed in Section 5.
- **Treatment Operations –** Treatment facilities strip produced water and natural gas condensate from the produced gas. Based on the Environmental Assessment for the Piceance Development Project submitted by ExxonMobil, treatment facility operations require approximately 0.14 acre-feet of fresh water per Bcf[21]. Table 3-2, Direct Unit Water Demands for Natural Gas, provides a summary of the direct unit water demands associated with natural gas drilling and production.

Table 3-2. Direct Unit Water Demands for Natural Gas

Process	Water Demand
Construction of Well Pads and Appurtenances	0.05 acre-feet/well
Drilling	0.25 acre-feet/well
Frac'ing	1.5 acre-feet/well
Dust Suppression	0.30 acre-feet/well
Treatment Operations	0.14 acre-feet/Bcf

Notes:
Bcf = billion cubic feet

The estimated total direct water demands (Table 3-3, Total Direct Water Demands for Natural Gas) to support the natural gas drilling and production activities for each of the planning horizons and production scenarios were calculated by applying the unit demands presented in Table 3-2 to the production scenarios presented in the Table 3-1.

[21] Treatment capacity of 150 Mcf/day applied to an annual demand of 7.7 acre-feet.

Table 3-3. Total Direct Water Demands for Natural Gas (values in acre-feet/year)

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	2007: 2,965 2017: 4,292	2018: 3,133 2035: 4,880	2018: 3,165 2035: 5,230
Mid-Term (2018–2035)	2018: 4,168 2035: 3,975	2018: 5,044 2035: 4,874	2036: 5,437 2050: 5,276
Long-Term (2036–2050)	2036: 3,869 2050: 2,834	2036: 4,769 2050: 3,285	2036: 5,171 2050: 3,686

3.1.5 Natural Gas Limitations

The potential limitations of natural gas production include pipeline capacity, economics of processing, water availability, worker availability, disposal of produced water, and regulations including those pending by the COGCC.

The estimated water demands as shown in Table 3-3 are attributable to the total *fresh water* demands. Produced water is often used either exclusively or some extent depending on the water quality and site-specific conditions in such processes as frac'ing and occasionally drilling. Future advances in water treatment technology could create a potential for further use and re-use of produced water in the natural gas industry. Using a rule-of-thumb estimate of 80 to 110 bbl of water produced for every 1,000 million cubic feet (Mcf) of gas that is produced (BLM 2007b), the natural gas industry could potentially produce 2 to 3 times as much water on an annual basis as is required for its direct demands depending on the production scenario. Produced water that is not re-used is either trucked to disposal facilities, re-injected into the ground, evaporated, or occasionally treated and released to surface waters. Currently the disposal of produced water is one of the largest potential barriers to the expansion of the natural gas production[22] (DOE 2003).

3.2 COAL

Domestic coal consumption attained record levels during 2007 reaching 1,128 million tons and was used primarily for electric power generation which accounted for 92 percent of coal

[22] Natural gas production in the Powder River Basin in Wyoming is enough to supplement the region's annual rainfall of 16.6 inches by approximately 0.1" (US DOE, 2003).

consumption (EIA 2006b). Coal-fired electrical generation currently comprises half of the Nation's power generation capacity. Today, coal-fired electricity generation accounts for approximately 72 percent of Colorado's electricity needs[23] (CMA 2006).

In western Colorado, coal is generally found in seams of sedimentary layers and is mined by both surface and underground mining operations. Coal production in Colorado averaged 36.25 million tons per year (tpy) between 2001 and 2007 based on production data provided by the Colorado Mining Association (CDRMS 2008). Coal mines within the study area produced 51 percent of this coal. Figure 3-3, Coal Resources, provides an overview of the surface and underground mines within the study area. Water demands associated with coal mining are not significant. In fact, many coal mining operations produce water through the dewatering activities as opposed to consuming water to support mining operations[24]. A drastic increase in water use attributable to coal production may be likely if unconventional coal production activities such as coal liquefaction or coal gasification occur. These processes require approximately 10 times the amount of water compared to conventional coal mining (BLM 2006a).

3.2.1 Coal Background

In the State of Colorado there are eleven active, producing coal mine permits; three surface mines and eight underground mines. Five of these mines, Deserado (Rio Blanco County), McClane Canyon (Garfield County), Foidel Creek (Routt County), Colowyo (Moffat County), and Trapper Strip (Moffat County) are located in the study area of which all are located near coal outcrops (See Figure 3-3, Coal Resources). New coal mines will most likely occur in the area of these coal outcrops. Table 3-4, Coal Production in Study Area Compared to Colorado Production, provides a comparison of the coal production at the five coal mines located in the study area from 2001 to 2007 to the total volume of Coal produced in Colorado during this timeframe.

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[23] Currently there are two coal-fired electrical generation facilities located in the study area, one in Hayden, Colorado and one in Craig, Colorado.

[24] De-watering flow rates at the proposed Red Cliff mine are expected to range from 800 to 1,000 gallons per minute, 1,300 to 1,600 acre-feet per year, at full build out (Personal Communications January 2008-August 2008). This rate of de-watering exceeds the estimated water requirements associated with the production of 8 million tpy by a ratio of approximately 3:1.

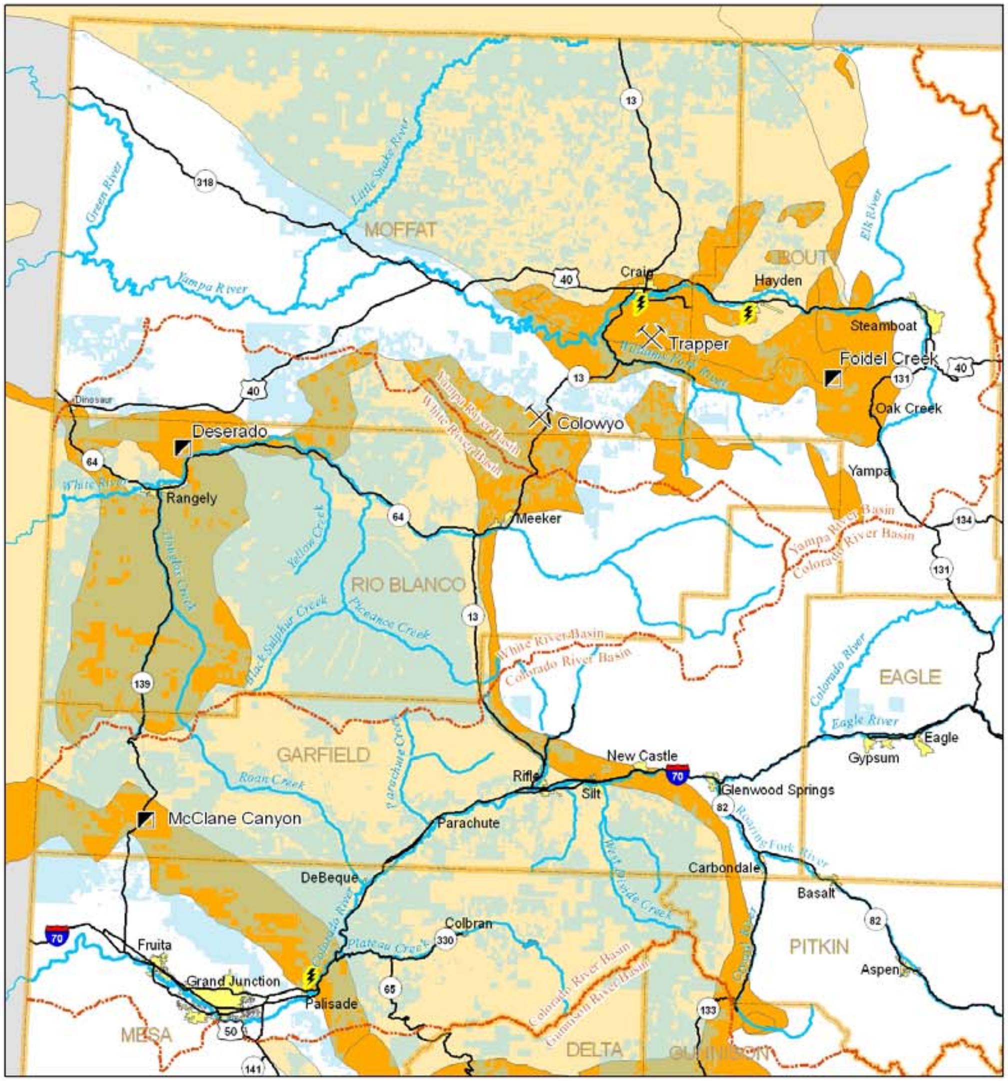


FIGURE 3-3
Coal Resources

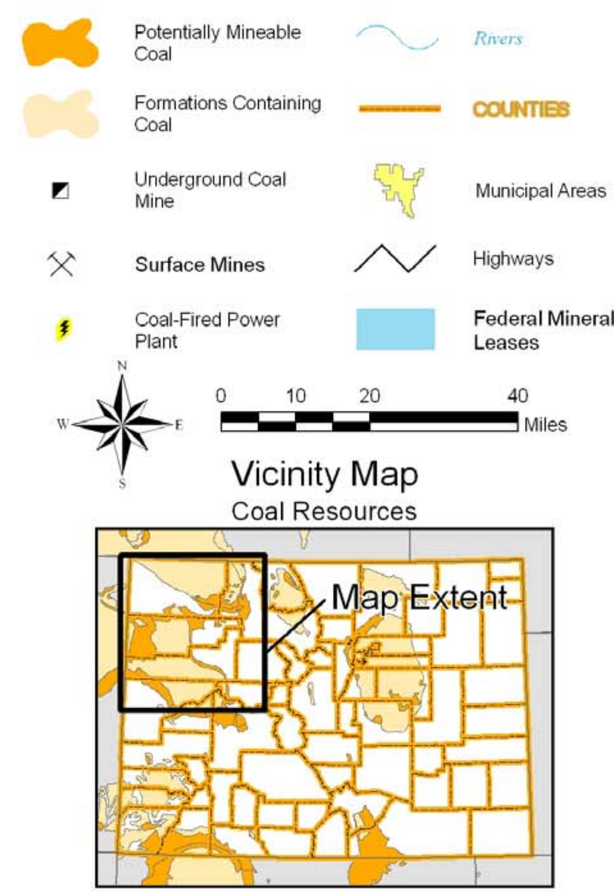


Table 3-4. Coal Production in Study Area Compared to Colorado Production (values in million tons unless noted otherwise)

Year	Study Area Mines						Total Colorado Production	Percent within Study Area
	Colowyo Coal Mine	Deserado	Foidel Creek Mine	McClane Canyon	Trapper Strip	Total		
2001	5.77	2.03	7.71	0.32	1.94	17.77	33.41	53%
2002	5.35	2.09	7.57	0.33	2.04	17.38	35.20	49%
2003	5.00	1.94	8.13	0.27	1.85	17.19	35.88	48%
2004	6.38	2.55	8.56	0.29	1.84	19.61	39.81	49%
2005	5.87	2.15	9.37	0.26	1.91	19.56	37.82	52%
2006	6.34	1.71	8.55	0.27	2.08	18.95	35.49	53%
2007	5.62	1.42	8.29	0.25	2.48	18.06	36.14	50%
Avg.	5.76	1.99	8.31	0.28	2.02	18.36	36.25	51%

Notes:
% = percent
Avg = average

In addition to abundant supply, Colorado coal is generally of a high quality. Four components are important in determining the quality of a certain coal: ash, sulfur, and mercury content, as well as the heat value in Btu. Ideal levels for these parameters are low ash, sulfur, and mercury levels and a high heat value. In general, Colorado coal can be characterized as a moderate ash, low sulfur, high Btu coal (CGS 2007). The sulfur content is four times lower than the average eastern bituminous coal (Personal Communications 2008).

The demand for Colorado coal appears to be steady and expected to continue into the foreseeable future given the high quality of the resource and that half of domestic electrical generation capacity is reliant on coal. The only constraint to future growth appears to be existing railway capacity[25] (CGS 2007).

[25] Most coal produced in the study area is transported by rail. The main constraint on coal shipments emanating from the study area is Moffat Tunnel which would require an estimated $500 million to enlarge to a two-way tunnel.

3.2.2 Coal Primary Sources of Information

The following information sources were used for developing the production scenarios for coal:

- AGNC Northwest Colorado Socioeconomic Analysis and Forecasts conducted by BBC Research and Consulting in 2008 (BBC 2008)
- Colorado Mining Association Coal and Mineral Production Fact Sheet (CMA 2006)
- Colorado Mineral and Energy Industry Activities (CGS 2007)
- Department of Energy, Energy Outlook Forecasts (BLM 2007a, DOE 2007b)

3.2.3 Coal Production Scenarios

The EIA estimates there are 9,761 Mtons of recoverable coal in all of Colorado (CGS 2007). The Colorado Mining Association estimates that Colorado's electrical demands could be supplied by coal produced in Colorado for the next 250 years at current production rates. Based on this data it was assumed that coal resources within the study area are sufficient enough to accommodate all of the production scenarios discussed herein.

Currently there is one new coal mining permit application pending in the study area known as the Red Cliff Mine located near the McClane Canyon coal mine. This permit application is for the production of 2.5 million tpy that could be sustained for approximately 6 years with the current BLM mineral lease. This mine will only begin production as early as 2011 assuming all necessary permits are obtained and construction of production facilities proceeds according to schedule. Production at the Red Cliff Mine will be accomplished by underground mining.

Depending on additional mineral lease and right of way applications with the BLM, total production at full build-out could reach a maximum of 8 million tpy. The timeline required to reach this level of production is estimated to be at least 10 years. If the additional mineral lease is obtained coal reserves at the Red Cliff Mine location could sustain production levels of 8 million tpy for approximately 30 years (Personal Communications 2008).

3.2.3.1 Coal Low Production Scenario

Production rates for the low scenario are estimated to remain steady at 18 million tpy until the Red Cliff Mine becomes operational in 2011 (near-term). The Red Cliff Mine is estimated to produce 2.5 million tpy. This will increase coal production to approximately 21.5 million tpy, an increase of 14 percent over current production levels. It is assumed that this production level will be maintained throughout the mid- and long-term planning horizons and sustained by existing and/or new mines in the study area.

3.2.3.2 Coal Medium Production Scenario

Production rates for the medium scenario are the same as the near-term/low production scenario. Beginning in the mid-term planning horizon (2018) it is assumed that the Red Cliff Mine will receive the necessary mineral leases and rights of way to accommodate 8 million tpy of production. This will increase coal production to approximately 26 million tpy, an increase of 44 percent over current production levels. It is assumed that this production level will be maintained throughout the mid- and long-term planning horizons and sustained by the existing and/or new mines in the study area. It is also assumed that the rail line capacity will expand to accommodate these increasing production levels.

3.2.3.3 Coal High Production Scenario

Production rates for the high scenario were assumed to be the same as the medium production scenario for the near- and mid-term. Additional assumptions include the expansion of the rail line capacity to meet the increase in production and that a coal gasification or liquefaction production facility will be brought on-line at the beginning of the long-term planning horizon converting approximately 4 million tons of coal annually[26] into liquids or gases. Although no data were found supporting the presence or planning of an unconventional coal production industry within the study area, this assumption was made for the purposes of assessing the potential water demands associated with such an industry.

Table 3-5, Assumptions Supporting the Coal Production Scenarios, summarizes the assumptions for all three production scenarios and planning horizons.

[26] This amount equals half of the production of the largest producing mine in the study area, the Foidel Creek Mine.

Table 3-5. Assumptions Supporting the Coal Production Scenarios

Planning Horizon	Production Scenarios		
	Low	**Medium**	**High**
Near-Term (2007–2017)	Red Cliff Mine begins producing 2.5 million tpy by 2011. Total production holds steady at 20.5 million tpy.	No change from Low/Near-Term production scenario.	No change from Low/Near-Term production scenario.
Mid-Term (2018–2035)	Production rate remains steady at 20.5 million tpy.	Red Cliff Mine begins producing 8 million tpy by 2018. Total production holds steady at 26 million tpy.	No change from Medium/Mid-Term production scenario.
Long-Term (2036–2050)	Production rate remains steady at 20.5 million tpy.	No change from Medium, Mid-Term scenario.	Add 1 coal gasification or liquefaction plant in northwest Colorado processing approximately 4 million tons of coal per year. Total coal production of 30 million tpy

Notes:
tpy = tons per year

3.2.4 Coal Direct Water Demands

Coal production essentially involves two processes: mining and preparation. Mining activities pertain to the extraction and handling of coal from coal seams while preparation involves the activities associated with separating unwanted rock from coal. Once mined, coal (in Colorado) is transferred via railway. Approximately one-third of coal produced in Colorado supplies in-state coal-fired power plants, accounting for 98 percent of coal consumption in Colorado. The remaining two-thirds of coal produced in Colorado are exported out of state (CGS 2007).

There are three types of direct water demands associated with coal production:

1) **Mining –** Direct water demands relating to the coal mining process are primarily associated with dust suppression. Underground mines typically have higher water demands to support dust suppression activities than surface mines. This is due in part to the confining environment of underground mines. Although the water demand may be different between the two types of mines, both have similar dust suppression activities such as dust suppression via spraying along conveyor belts, at railway loadout docks, truck loadout docks, stockpile locations and along access roads.

2) **Preparation/Washing –** Waste rock is separated from coal by placing coal in pools of high-density water[27]. The high-density water can be recycled but must be replaced at a rate equal to the amount of water present in the coal skimmed from the process (Personal Communication January 2008-August 2008).
3) **Reclamation –** Revegetation and grading associated with reclamation of disturbed areas resulting from mining requires water. This is a one-time water demand that occurs once portions of the mine no longer producing coal are closed. Waste rock piles also require reclamation.

The breakdown of the direct water demand requirements associated with unconventional coal production, such as gasification and liquefaction, was not well established in this study other than the increase in water demand for one of these facilities is approximately 10 times that of conventional surface and underground mining (BLM 2006a). Table 3-6, Direct Unit Water Demands for Coal Production, summarizes the direct unit water demands for coal production. Table 3-7, Total Direct Water Demands for Coal Production, summarizes the total direct water demands for coal production.

Table 3-6. Direct Unit Water Demands for Coal Production

Process	Underground Mine Water Demand (acre-feet/million tons)
Dust Suppression	37
Coal Preparation	21
Reclamation	1.15
Coal Gasification or Liquefaction	822

Applying the unit demands presented in Table 3-6 to the production levels presented in Table 3-5 yields the total direct water demands (Table 3-7).

Table 3-7. Total Direct Water Demands for Coal Production (values in acre-feet/year)

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	1,213	1,213	1,213
Mid-Term (2018–2035)	1,213	1,538	1,538
Long-Term (2036–2055)	1,213	1,538	5,063

[27] As part of the coal separation process, iron is added to water to increase the density by a factor of 1.5 to 2.0. This will allow the coal to float and settle/separate from the waste rock.

3.2.5 Coal Limitations

With the vast majority of domestic coal consumption emanating from electric power generation,[28] the only foreseeable events that could lead to a decrease in coal demand would likely be related to the coal-fired power industry. These events could include:

- More stringent environmental regulations pertaining to carbon dioxide (CO_2) emissions. The potential exists for Colorado coal production to drop after 2015, the deadline set forth in the Clean Air Planning of Act of 2006, requiring CO_2 emissions and other pollutants from coal-fired power plants not to exceed 2001 levels. In the event that the industry response to this legislation is to retrofit existing plants with emissions scrubbers, out-of-state consumers of Colorado coal may not prefer Colorado coal over local sources (Personal Communications January 2008-August 2008).
- Technological improvements/developments making alternative energy sources more feasible than coal-fired generation facilities.
- Federal/state legislation providing incentives for alternative energy development.
- Use of natural gas for thermoelectric power.

The impact of pending carbon capture and sequestration regulations on the direct water demands for coal are unknown but may increase the direct water demand for coal production/mining (BLM 2007b).

3.3 URANIUM

Although the overall interest for uranium production in the United States has been increasing with the desire to use unconventional energy resources, the likelihood that a uranium mine or production plant will start up in the study area is low. Uranium mining in Colorado has historically been located south of the study area near the Uravan Mineral Belt region, south of Grand Junction in Mesa County (Figure 3-4, Uranium Resources). The following discussion describes the potential uranium industry in the study area and the impacts that future development may have on estimated water demands.

[28] Approximately 50 percent of U.S. electric power generation in 2006 was by coal-fire power plants (EIA 2008).

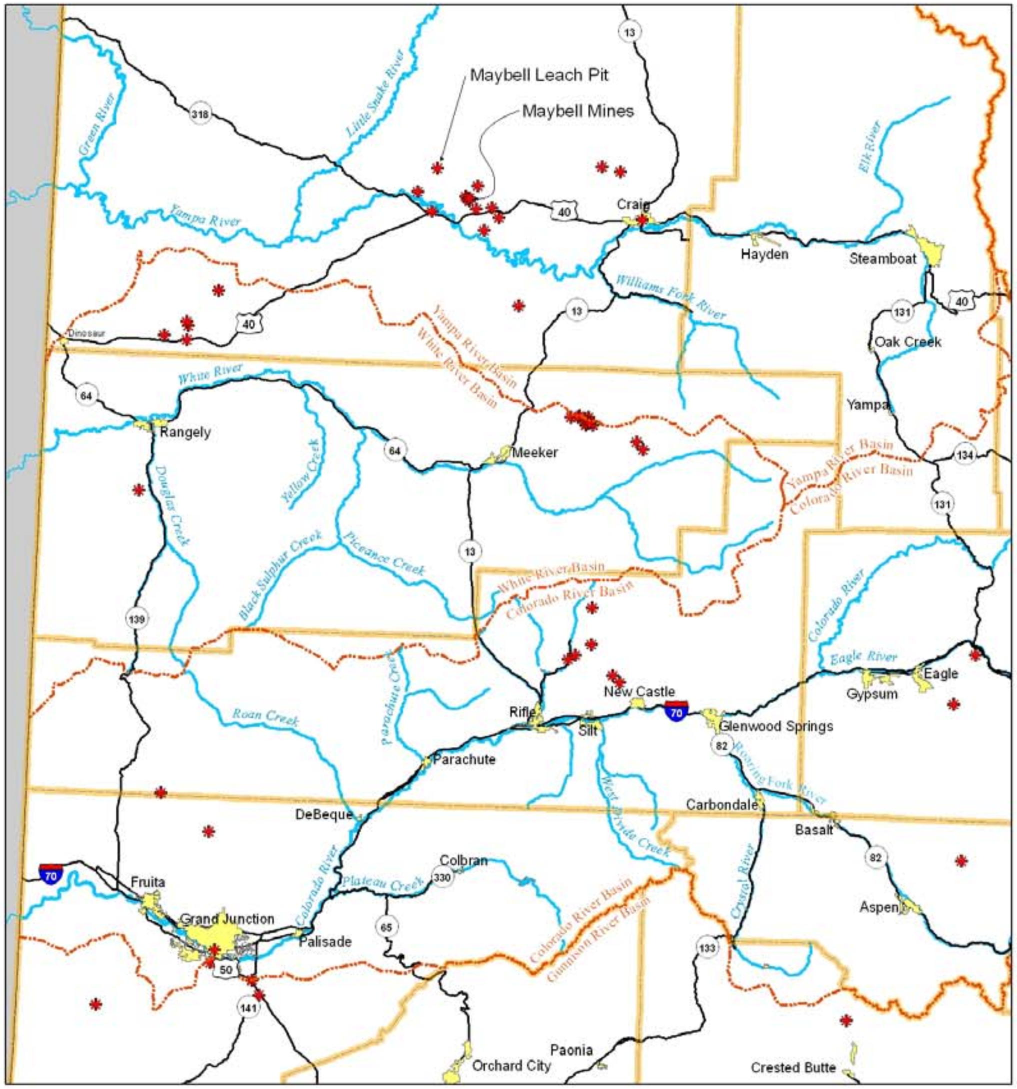


FIGURE 3-4
Uranium Resources

Legend

Uranium production locations (CGS, 1978). Locations indicated are mines where a portion or all of production included uranium. Uranium is often found with other metals, most commonly vanadium (a material that is used to harden steel). Currently there are no uranium mining operations in Colorado.

Rivers

COUNTIES

Highways

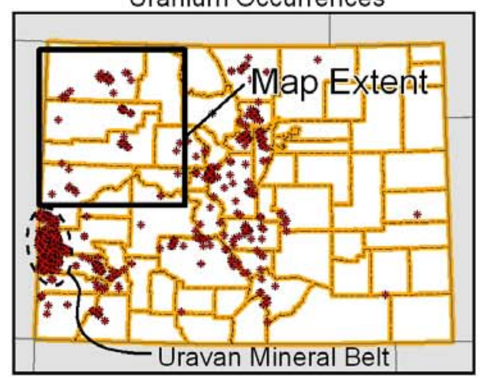
Municipal Areas

N W E S

0 10 20 40 Miles

Vicinity Map

Uranium Occurrences



3.3.1 Uranium Background

In 1939, uranium was discovered to be capable of releasing large amounts of energy through a nuclear chain reaction; one pound of uranium releases the energy equivalent of nearly 1 million pounds of coal (DRI 1981). Much of uranium mined in Colorado occurred shortly after this discovery in the 1940s and most recently boomed in the 1970s. The majority of uranium districts in Colorado are located on the Western Slope, predominately in the Uravan Mineral Belt. The uranium districts in the study area also include the Maybell and Rifle regions. The types of deposits in these regions are generally sandstone type deposits in horizontal seams. Colorado ranks third, behind Wyoming and New Mexico, in available uranium reserves (CDRMS 2008b).

The last four operating uranium mines closed in 2005 (CDRMS 2008b). These four uranium mines produced over 250,000 pounds of uranium with a gross value of $7.3 million, yet a profit was unattainable at this time. Due to recent increases in the price of uranium interest in mining the resource has been renewed. A total of 32 uranium projects were permitted in the state in 2008 (CDRMS 2008b).

3.3.2 Uranium Primary Sources of Information

The following information sources were used for developing reasonable production scenarios for uranium:

- Colorado Geological Survey (CGS) Division of Minerals and Geology Bulletin 40. Radioactive Mineral Occurrences of Colorado (CGS 1978).
- State of Colorado Division of Reclamation, Mining and Safety Uranium Mining in Colorado 2008 (CDRMS 2008b)
- Denver Research Institute Water and Energy in Colorado's Future (DRI 1981).

3.3.3 Uranium Production Scenarios

The following summarizes the production scenarios for uranium.

3.3.3.1 Uranium Low Production Scenario

Production rates for the low scenario were assumed to correspond to current production of zero for near- mid-, and long-term planning horizons. Thus, water demands associated with energy development from uranium in this scenario were zero.

3.3.3.2 Uranium Medium Production Scenario

Production rates for the medium scenario assumed one underground uranium mine will begin production during the mid- and long term planning horizons. Previous production totals in the Maybell area were approximately 200,000 lbs, or 100 tons, per year during the 1970s. This required the mining and processing of approximately 75,000 tons of ore[29]. For the purposes of this study the 1970 production levels were assumed for this scenario.

3.3.3.3 Uranium High Production Scenario

Production rates for the high scenario assumed one underground uranium mine will begin production in the near and mid-term planning horizons. One additional underground mine is assumed to begin production during the long-term planning horizon. The high production scenario also assumes one uranium mill begins operation during the long term planning horizon as well.

Table 3-8, Assumptions Supporting the Uranium Production Scenarios, summarizes the assumptions outlined above for all three production scenarios and planning horizons. Each mine is assumed to produce ore at a rate of approximately 75,000 tpy resulting in roughly 100 tons of uranium. This level of mine production was used for all production scenarios presented in Table 3-8.

[29] Calculation – Average ore grade of 0.13 percent U_3O_8 from ore mined in Moffat County (CGS 1978).

Table 3-8. Assumptions Supporting the Uranium Production Scenarios

Planning Horizon	Production Scenarios – Uranium		
	Low	Medium	High
Near-Term (2007–2017)	No uranium mining within project area.	No uranium mining within project area.	1 underground uranium mine.
Mid-Term (2018–2035)	No uranium mining within project area.	1 underground uranium mine.	1 underground uranium mine.
Long-Term (2036–2050)	No uranium mining within project area.	1 underground uranium mine.	2 underground uranium mines: 1 in Mesa County and 1 in Moffat County.

3.3.4 Uranium Direct Water Demands

Water demands associated with uranium production are similar to that of other underground mineral resources: ore is mined and then must go through a preparation process by which waste rock is separated from the desired mineral. For this reason the unit water requirements associated with dust suppression for underground coal mining were assumed to be applicable for underground uranium mines in the absence of any active uranium mines in the study area.

Once mined, uranium ore is sent to a mill for processing. The water requirements associated with milling are much higher than the demands associated with mining. A unit demand of approximately 281 acre-feet per 1,000 tons per day milling plant (DRI 1981). Though currently closed, the Englewood-based Cotter Corporation operated a uranium mill as recently as 2005 in Canon City. The Canon City uranium ore mill is one of only four uranium mills in the U.S. (CDRMS 2008b). It is unlikely that uranium milling will take place within the study area, however for the purposes of this study milling is assumed to take place within the study area in order to provide a conservative estimate of water demands (Personal Communications 2008).

Heap leaching was implemented at the Maybell Mine in Moffat County during the 1970s to extract U_3O_8, a.k.a. yellowcake, from uranium ore (CGS 1978) however documented water use associated with the operation of the Maybell Mine was not available. An additional method of uranium ore production is solution mining, however for the purposes of this study it was assumed that solution mining of uranium is not feasible in the study area. This is due primarily to the location of the deposits within impermeable rock and sandstone. Table 3-9, Direct Unit

Water Demands for Uranium Production, summarizes the direct water demands for uranium production in the study area.

Table 3-9. Direct Unit Water Demands for Uranium Production

Process	Underground Mine + Milling Water Demand (acre-feet/ton)
Underground Mining Dust Suppression	0.03
Uranium Ore Milling	0.59

Applying the unit demands presented in Table 3-9 to the production levels presented in Table 3-8 yields the total direct water demands presented in Table 3-10, Total Direct Water Demands for Uranium Production.

Table 3-10. Total Direct Water Demands for Uranium Production (all values in acre-feet/year)

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	No uranium mining within project area	No uranium mining within project area	62
Mid-Term (2018–2035)	No uranium mining within project area	62	62
Long-Term (2036–2050)	No uranium mining within project area	62	124

Note: Assumes uranium ore milling takes place within the study area.

3.3.5 Uranium Limitations

Most uranium resources in Colorado are south of study area in the Uravan Mineral Belt. Factors potentially limiting uranium production include environmental permitting, occupational underground mining regulations, and federal energy policy pertaining to the use of nuclear power plants.

3.4 OIL SHALE

Due to recent trends in the price of crude oil, there is a renewed interest in unconventional oil sources including oil shale in northwestern Colorado. As world-wide demands for oil continue to rise, domestic production has declined causing an increase in oil imports. A shrinking excess of world-wide production infrastructure has lessened the oil industry's ability to cope with supply disruptions. These events have thus caused heightened volatility and an increase in oil prices. Domestic demand for oil increased by 25 percent between 1985 and 2004 to 20 million bpd. During this same period, U.S. imports more than doubled, to over 12 million bpd (Andrews 2006).

3.4.1 Oil Shale Background

The Green River Formation, located in northwestern Colorado, northeastern Utah, and southwestern Wyoming, contains the world's largest known deposits of oil shale, an estimated 8 trillion bbl of shale oil (Andrews 2006). Estimates of the economically recoverable amount range from 1.5 to 1.8 trillion bbl (more than 15 gallons per ton) (Bartis et al. 2005).

In 1973, the USGS completed a detailed characterization of the Green River Formation oil shale resource. Table 3-11, Oil Shale Resources in the Green River Formation (BLM 2006b), provides a summary of the information gathered in this study. This study also estimated a total of almost 1.8 trillion bbl of recoverable shale oil in the Green River Formation of which 1.2 trillion bbl are located in Colorado (BLM 2006b). Other estimates have stated the amount of shale oil that is technically recoverable, when taking into account topographic and environmental constraints, is as low as 500 billion bbl. Even these low estimates are larger than Saudi Arabia's proven crude oil reserves of 267 billion bbl. U.S. proven crude oil reserves are 22 billion bbl (Andrews 2006).

The 2008 BLM Draft PEIS focused on areas within the Green River Formation containing the "most geologically prospective oil shale". In Colorado this was defined as oil shale deposits with an expected shale oil yield greater than 25 gallons per ton and measuring at least 25 feet in thickness. Figure 3-5, Oil Shale Resources, shows the location of the most geologically prospective oil shale deposits in Colorado as defined in the BLM Draft PEIS. An estimated one half trillion bbl of shale oil could potentially be recovered from these deposits.

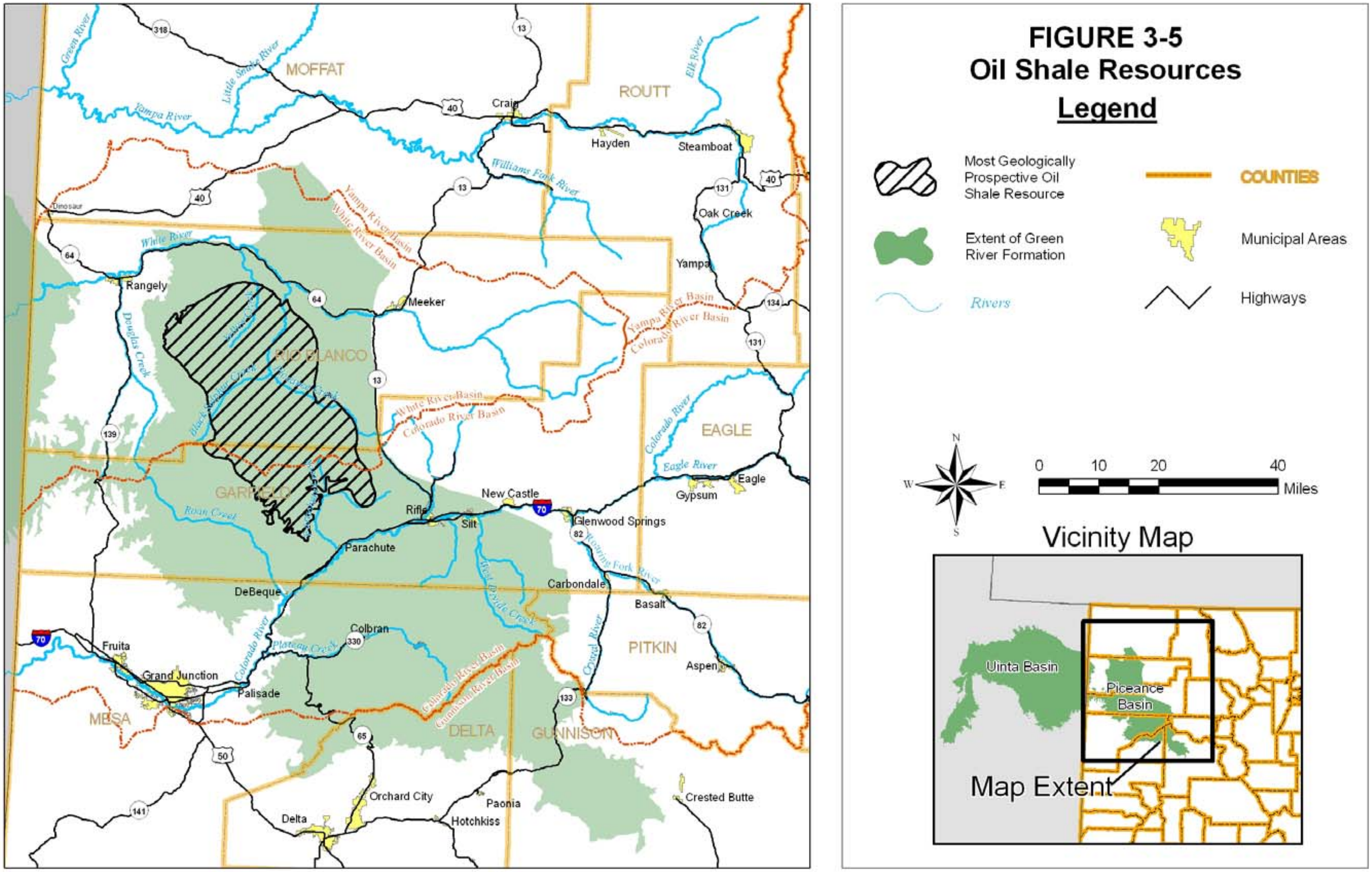


FIGURE 3-5
Oil Shale Resources

Table 3-11. Oil Shale Resources in the Green River Formation (BLM 2006b)

State	Federal Ownership (Yes/No)	Min. Shale Thickness (feet)	Avg. Shale Thickness (feet)	Yield (gal/ton)	Average Yield (gal/ton)	Acreage (1,000 acres)	Total Resources (billion bbl)
Colorado	Yes	-	-	<10	5	570	-
	Yes	15	1,323	15-25	20	300	600
	Yes	10	287	>25	30	600	390
	No	-	-	<10	5	165	-
	No	15	1,075	15-25	20	80	130
	No	10	208	>25	30	170	80
	Total, Colorado		723	-	-	1,885	1,200
Utah	Yes	-	-	<10	5	2,130	-
	Yes	15	93	15-25	20	1,070	150
	Yes	10	51	>25	30	600	70
	No	-	-	<10	5	640	-
	No	15	83	15-25	20	320	40
	No	10	52	>25	30	170	20
	Total, Utah		70	-	-	4,930	280
Wyoming	Yes	-	-	<10	5	1,500	-
	Yes	15	142	15-25	20	700	150
	Yes	10	22	>25	30	400	20
	No	-	-	<10	5	890	-
	No	15	120	15-25	20	440	80
	No	10	17	>25	30	260	10
	Total, Wyoming		75	-	-	4,190	260
Total	**-**	**289**	**-**	**-**	**-**	**11,005**	**1,740**

Notes:
> = greater than
< = less than
bbl = barrels
gal = gallons

3.4.2 Oil Shale Primary Sources of Information

The following information sources were used for developing reasonable production scenarios for oil shale:

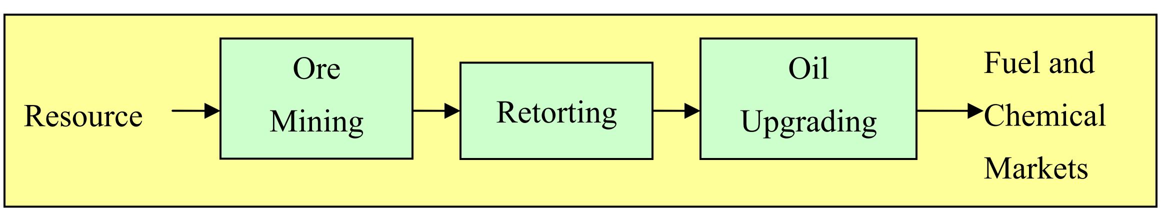
- AGNC Northwest Colorado Socioeconomic Analysis and Forecasts conducted by BBC (2008)
- Task Force on Strategic Unconventional Fuels (2007)

- National Strategic Unconventional Resource Model prepared by the Office of Naval Petroleum and Oil Shale Reserves (AOC 2004)
- BLM Draft PEIS (BLM 2007a)
- Oil Shale Development in the United States submitted by RAND, prepared for the National Energy Technology Laboratory of the U.S. Department of Energy (Bartis, et. al. 2007)
- Shell RD & D Plans of Operations (BLM 2006b)
- 1973 Final U.S. Department of Interior Environmental Statement for the Prototype Oil-Shale Leasing Program (DOI 1973)
- Oil Shale Exploration Company (OSEC) (OSEC 2008)
- National Oil Shale Association (NOSA) (Personal Communications 2008)

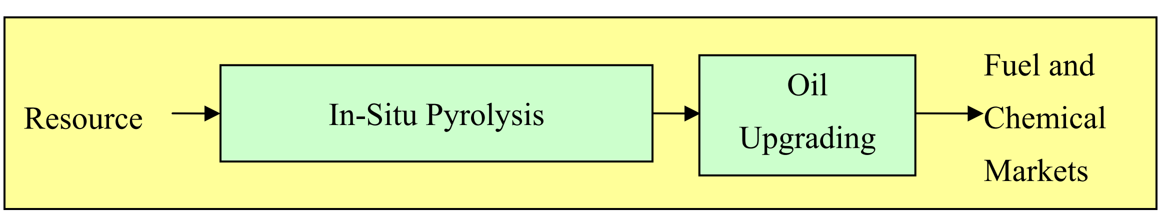
3.4.3 Oil Shale Production Scenarios

There are two basic methods for retorting oil shale: surface retort and true in-situ retort. Figure 3-6, Conceptual Oil Shale Surface Retort and True In-Situ Retort Processes, illustrates these two basic sequences of shale oil production. The surface retort process requires the mining of oil shale which can be accomplished by either surface mining or underground mining. Once the oil shale has been mined, it is crushed and prepared for surface retort, which is usually

Figure 3-6. Conceptual Oil Shale Surface Retort and True In-Situ Retort Processes



True In-Situ Retort Process



accomplished in a kiln. Retort processes include the Paraho (vertical kiln), the TOSCO II and the Alberta Taciuk retort processes[30] (ATP) (both using horizontal kilns). The ATP is successfully being implemented on a large scale in Canada for the mining of tar sands (SUFTF 2007).

The primary sources of water demands for the surface retort process include:

- Mining/Processing – Site preparation, mining and crushing, and dust suppression
- Retorting – above-ground oil shale processing
- Shale oil upgrading
- Reclamation – re-vegetation and spent shale disposal

Underground mining for surface retorting technologies also have significant electrical demands, which are discussed further in Section 5.

The true in-situ retort conversion process involves heating the oil shale in-place underground. One early form of this process, known as modified in-situ (MIS), involved mining portions beneath the target shale. This shale was rublized and then combusted creating temperatures high enough for retorting.

Recently, Shell Oil introduced a true in-situ process that does not require combustion of the oil shale. This process is referred to as the In-Situ Conversion Process (ICP). It involves the installation of downhole electric heaters that heat the oil shale over a period of 2 to 3 years. This slow heating produces higher grade oil. The ICP retort is a true form of in-situ retorting and is the form of retorting referred to in the development scenarios herein. At the time of this study the documentation describing the Shell ICP was the most detailed among the information reviewed. For this reason this process was used to estimate the oil shale in-situ water demands, recognizing that the technology is still being developed.

The primary sources of water demands for the ICP retort process include:

[30] OSEC plans on testing the ATP process for the surface retorting of oil shale. OSEC's plans are to reopen the White River Mine (located on the former prototype leasing program Ua lease tract) to supply a 50,000 bpd aboveground retort facility.

- Site Preparation and Drilling – drilling of downhole heater wells, freeze wall wells, and production wells, dust suppression of access roads, and construction of facilities.
- Retorting and Extraction – downhole heating and shale oil/gas recovery.
- Reclamation – rinsing of the formerly heated underground production area and surface reclamation.

An additional and potentially substantial water demand associated with the ICP is the water used in the thermoelectric power generation if electric heating is employed. The water demands associated with thermoelectric power generation are significant. Other options exist to facilitate the downhole heating necessary for ICP that may not use much water. However, the Shell ICP is the basis for this study and its current state requires electric power for downhole heating. Water demands for power generation are discussed further in Section 5.

As stated in the AGNC (BBC 2008), one of the conclusions of the BLM Draft Programmatic EIS was that sufficient information was not available to predict the magnitude, location, production technologies, and development timeline for a commercial oil shale industry. Currently there are five RD&D leases on BLM lands within the Piceance Basin. The success of these leases will likely be instrumental for future development of a commercial oil shale industry. Recovery of shale oil from the Green River Formation will rely heavily on federal policy given that approximately 72 percent of total oil shale acreage is located on federal lands (Andrews 2006). Within the Piceance Basin more than 80 percent of oil shale is located on federal lands (Bartis 2006).

The formulation of production scenarios is largely based on information available from previous commercial oil shale activity during the 1970s and 1980s in the Piceance Basin in addition to the success of the Alberta tar sands industry which began in the 1960s. Alberta tar sands production topped 1 million bpd by 2004 and is estimated to reach 5 million bpd by 2030 (Woynillowicz and Severson-Baker 2006). There are many similarities between the Alberta oil sands and Green River Formation oil shale:

- Both are unconventional resources with reserves exceeding one trillion bbl.

- The production steps for surface retorting are somewhat analogous requiring mining, retort, upgrading, and spent product disposal. In-situ technologies appear to be viable for both as well.
- Development of the initial commercial industry infrastructure is a challenge from an engineering, planning, economic, and socioeconomic perspective.

The yield of oil shale is higher on a per ton basis than that of oil sands and the oil derived from oil shale is of a higher quality. However the external energy requirements to produce shale oil are higher than that of oil sands. Overall, the net efficiency of an oil shale industry appears to be similar to that of the oil sands industry. (Bunger 2004).

Regardless of the timeline and extent of production, a commercial oil shale industry will likely have to progress through four phases in order to attain commercial scale (more than 100,000 bpd) production (Table 3-12, Estimated Timeline for Oil Shale Industry).

Table 3-12. Estimated Timeline for Oil Shale Industry (Bartis 2006)

Phase	Description	Years to Transition
1	RD&D	0
2	Scale Up and Confirmation	6–8
3	Initial Commercial Production (> 50,000 bpd)	12–16
4	Production Growth (> 100,000 bpd)	> 16
	> 1 million bpd	> 20
	> 3 million bpd	> 30

Notes:
> = greater than
bpd = barrels per day
RD&D = Research Development & Demonstration

Activity on RD&D leases is only just beginning. Based on the plan of operations submitted by Shell Frontier (Shell Frontier has three of the five RD&D leases on BLM lands in the Piceance Basin), production is expected to take place during the third and fourth years and final reclamation is expected to end during the 16th year of operations. Once RD&D is complete and assuming it is successful, it is estimated that the time to obtain financing, design facilities, and obtain permits could take another 6 to 8 years (Bartis 2006). For these reasons commercial oil shale development is not expected to take place during the near term (2007–2017) in any of the production scenarios. This assumes that permitting, financing, etc. does not begin until the technology being tested in the RD&D leases are proven to be successful.

3.4.3.1 Low Production Scenario

Production rates for the low scenario assume that external pressures from a variety of sources (technical, regulatory, political, economics, etc.) do not allow the industry to progress out of the RD&D phase of development. This could occur due to failure of RD&D leases to adequately demonstrate commercial and environmental viability of shale oil production.

3.4.3.2 Medium Production Scenario

Production rates for the medium production scenario assume that the industry's success highly demonstrates the commercial viability of both in-situ retorting and underground mining combined with surface retorting. Currently the OSEC has an RD&D lease with the BLM in Utah located near the White River approximately eight miles from the Colorado/Utah border. It is reasonable to assume that a surface retort facility in Colorado would implement underground mining versus surface mining, given the geologic setting of oil shale deposits in the Piceance Basin having a thickness of overburden ranging from 500 to 2,000 feet in most areas. However, there are areas in the Piceance Basin, near oil shale outcrops, where surface mining could be employed.

For the medium production scenario, production levels are assumed to be 50,000 bpd for surface retorting (supported by either the re-opening of the White River Mine itself or similar operation elsewhere within the study area) and 25,000 bpd of in-situ retorting, respectively, during the mid term. It is assumed that a commercial size in-situ retort operation is still in the scale-up phase of development during the mid-term and has not yet advanced to the 50,000-bpd commercial production threshold. For the long-term planning horizon the operation of a 50,000-bpd underground mine with surface retort is assumed to continue and in-situ retort operations are assumed to reach 150,000 bpd.

3.4.3.3 High Production Scenario

Production rates for the high scenario are supported by the same assumptions pertaining to a commercial underground mine combined with surface retorting are used for the mid-term and long-term planning horizons. It is assumed, however, that production from in-situ operations will reach 500,000 bpd by the end of the mid-term (2035)[31] and ultimately 1.5 million bpd during the long-term planning horizons. These production levels also corroborate with projections made by the Task Force for Strategic Unconventional Fuels (SUFTF) [32] for a base case[33] and measured case[34] scenarios, respectively (see Table 3-14, Oil Shale Production Forecasts).

Table 3-13, Assumptions Supporting the Oil Shale Production Scenarios, summarizes the assumptions outlined above for all three production scenarios and planning horizons.

Table 3-13. Assumptions Supporting the Oil Shale Production Scenarios

Planning Horizon	Production Scenarios – Oil Shale		
	Low	**Medium**	**High**
Near-Term (2007–2017)	No Commercial Production RD&D Leases Only	No Commercial Production RD&D Leases Only	No Commercial Production RD&D Leases Only
Mid-Term (2018–2035)	No Commercial Production RD&D Leases Only	Underground mine/surface retort facility with 50,000 bpd production. Additional 25,000 bpd of in-situ production.	Underground mine/surface retort facility with 50,000 bpd production. Additional 500,000 bpd of in-situ production.
Long-Term (2036–2050)	No Commercial Production RD&D Leases Only	Underground mine/surface retort facility with 50,000 bpd production. Additional 150,000 bpd of in-situ production.	Underground mine/surface retort facility with 50,000 bpd production. Additional 1.5 million bpd of in-situ production.

Notes:
bpd = barrels per day
RD&D = Research, Development, and Demonstration

The BLM Draft PEIS did not specifically forecast production levels but did provide analyses of the effects associated with 50,000 bpd production from surface and underground mining as well as 200,000 bpd from in-situ.

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31 Consistent with the AGNC Socioeconomic Study

32 Task Force consists of 11 members including the Secretaries of the DOE, Department of Defense, and the DOI; the governors of the states of Colorado, Kentucky, Mississippi, Utah, and Wyoming; and representatives of localities in those states that would be impacted by the development of the unconventional resources located therein.

33 The base case scenario is representative of current law and assumes that domestic demand steadily increases while domestic production of conventional oil remains flat.

Table 3-14 provides a comparison of various oil shale production forecasts as documented by this study, the SUFTF for a base case (see footnote 33) and measured case (see footnote 34) scenarios, and the National Strategic Unconventional Resource Model (NSURM). As indicated in the table, the production levels assumed for this study fall within the range of other national studies for oil shale.

Table 3-14. Oil Shale Production Forecasts

	Production Level (million bbl)						
	Table 3-13 (above)		SUFTF (2007)				Rand (Bartis 2006)
Planning Horizon	Medium Production Scenario	High Production Scenario	Base	Measured	Accelerated	NSURM (DOE 2006b)	(Table 3-12)*
Near-Term	0	0	0.05	0.05	0.31	2.66	0.1–1.0
Mid-Term	0.075	0.55	0.5	1.51	2.38	4.1	1.0–3.0
Long-Term	0.2	1.55	NA	NA	NA	NA	> 3.0

Notes:
* The production level forecasts presented by Rand (Bartis 2006) were presented as a timeline. This assumes that timeline started on or about 2006 with the granting of the first of the RD&D leases to Shell in 2006.
Note: The production levels associated with Table 3-13 are specific to the study area. All production levels other than those associated with Table 3-13 are for national oil shale production.
> = greater than
DOE = U.S. Department of Energy
NA = not applicable
NSURM = National Strategic Unconventional Resource Model
SUFTF = Task Force for Strategic Unconventional Fuels

3.4.4 Oil Shale Direct Water Demands

Direct water demands associated with oil shale development depend on the type of retort used to extract oil from the oil shale. Many references related to oil shale, including the Draft PEIS, assume 1 to 3 bbl of water are required per bbl of oil produced. The primary differences in water use between the two retort methods are related to the handling of oil shale. All surface retort processes require the mining of oil shale prior to retorting and disposal of spent shale after retorting. In-situ retorting does not require the handling of oil shale.

The information outlined in the final DOI environmental statement for the Prototype Oil-Shale Leasing Program (DOI 1973) were used as the basis for estimating water demands for the underground mining/surface retort process. This report tabulates water use by process for

[34] The measured case scenario attracts private capital due to policies that only require limited federal government

different types of mining and retort methods, including a 50,000-bpd surface retort accommodated by underground mining.

A summation of the water requirements presented in Table 3-15, Oil Shale Surface Retort/Underground Mine Annual Water Requirements for a 50,000-bpd Plant, equates to a unit water requirement of 2.9 bbl of water per bbl of produced shale oil.

Table 3-15. Oil Shale Surface Retort/Underground Mine Annual Water Requirements for a 50,000-bpd Plant

Process	Water Demand (acre-feet/year)
Mining and Crushing	440
Retorting	655
Shale Oil Upgrading	1,825
Processed Shale Disposal	3,650
Revegetation	350
Total	**6,920**

Notes: The water demand values presented are representative of the average of the range of values presented in DOI 1973, Table III-5 except for the thermoelectric power requirements for which the annual water demand was calculated separately (See Section 5).
bbl = barrel
DOI = U.S. Department of the Interior

The Environmental Assessment and various Plans of Operations submitted by Shell for the three RD&D lease sites were used as the basis for estimation of the water demands for in-situ retort. Table 3-16, Oil Shale In-Situ Retort Annual Water Requirements for a 50,000-bpd Plant, provides a summary of these water demands.

Table 3-16. Oil Shale In-Situ Retort Annual Water Requirements for a 50,000-bpd Plant

Process	Water Demand (acre-feet/year)
Site Preparation	417
Subsurface Preparation	583
Production/Upgrading	1,333
Reclamation and Rinsing of Pyrolyzed Zone	1,243
Total	**3,576**

Notes: See Section 5 for explanation of the water demands associated with thermoelectric power generation.
bbl = barrel

expenditure.

A summation of the water requirements presented in Table 3-16 equates to a unit water requirement of 1.5 bbl of water per bbl of produced shale oil. An additional, and potentially substantial water demand associated with the ICP, is water used in the thermoelectric power generation assuming electric heating is employed. Other options exist to facilitate the downhole heating necessary for ICP that may not use much water. However, the Shell ICP is the basis for this study and their technology requires electric power for downhole heating. Three companies are developing true in-situ technologies that do not involve electric heating and may use less water. However data for these technologies is not yet available (Personal Communications 2008). Water demands for power generation are discussed further in Section 5. Table 3-17, Comparison of Unit Oil Shale Production Requirements Among Various Sources, provides a comparison to other unit values used to estimate water demands associated with oil shale production.

Table 3-17. Comparison of Unit Oil Shale Production Requirements Among Various Sources (bbl of water : bbl of produced shale oil)

Retort Type	OTA (1980)	BLM PEIS (2007)	DOE (2006)	NOSA (2008)	URS Phase 1 Study
Surface Retort	2.1–5.2[35]	2.4–4.0[36]	2–5[37]	1.5–5[33]	2.9[32]
True In-Situ	NA	1–3[32]	1[38]	1.5[32]	1.5[32]

Notes:
bbl = barrel
BLM = U.S. Bureau of Land Management
DOE = U.S. Department of Energy
NOSA = National Oil Shale Association
OTA = Office of Technology Assessment
PEIS = Programmatic Environmental Impact Statement
URS = URS Corporation

Applying the unit demands of 2.9 and 1.5 bbl of water per bbl of produced shale oil for surface and in-situ retort, respectively, to the production levels presented in Table 3-13 yields the total direct water demands presented in Table 3-18, Total Annual Direct Water Demands for Oil Shale Production.

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[35] Applies to surface and underground mining and includes water for external power requirements.
[36] Does not include water required for external power requirements.
[37] Includes water for external power requirements.
[38] Includes water for external power requirements. Assumes electric heating is used for retort method.

Table 3-18. Total Annual Direct Water Demands for Oil Shale Production (all values in acre-feet/year)

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	No Commercial Production RD&D Leases Only	No Commercial Production RD&D Leases Only	No Commercial Production RD&D Leases Only
Mid-Term (2018–2035)	No Commercial Production RD&D Leases Only	8,586	42,106
Long-Term (2036–2050)	No Commercial Production RD&D Leases Only	17,407	112,675

Notes:
RD&D = Research Development and Demonstration

3.4.5 Oil Shale Limitations

Several factors potentially limiting the development of oil shale may include, but are not limited to, technology, environmental and other regulations, economics, development of other energy resources, water availability, and politics.

Indirect water uses are the water demands that result from the increase in the region's population due to energy development and production. The number of workers needed under each scenario for each energy resource is based on the production scenarios described in Section 2, Planning Horizons and Production Scenarios, combined with information developed during the recent AGNC socioeconomic study. This study incorporates the relationships developed in the AGNC study among production levels, direct jobs, indirect jobs, and total population. However, this study includes a somewhat larger study area than the AGNC study, and additional energy development scenarios, so not all results are directly comparable between the two.

This study addresses three components of the indirect water demands by the following categories:

- **Direct Workforce:** Workers directly employed by each of the energy sectors: natural gas, coal, uranium, and oil shale.
- **Indirect Workforce:** Workers employed in services, trade, and other sectors whose jobs are supported by expenditures from energy sector firms and/or direct workforce employees and their households.
- **Energy-Related Population:** The combination of the direct workforce, the indirect workforce, and their families. The energy-related population and water demand projections described later in this section are incremental estimates of the total population and water demands specifically resulting from the development and production of each energy resource.

For the purposes of this study a unit value of 200 gallons per capita per day (gpcd) was used to estimate the indirect water demands. There are numerous factors that affect per capita use rates, however for purposes of this study, this value fits within the range of available information obtained from the SWSI Phase I Report (CWCB 2004), which documents a value of 244 gpcd for municipal and industrial uses within the Colorado River Basin, and actual rates from local municipalities within the study area (Personal Communications 2008). The 200 gpcd unit value reflects the total water needs associated with the energy-related population, including their domestic use plus their per-capita share of the additional commercial and government water use arising from the energy-related population.

The following sections summarize the projected indirect water demands for natural gas, coal, uranium and oil shale. These numbers are provided in the same context as the direct water demands scenarios and production levels described in Section 2, combined with information developed during the recent AGNC socioeconomic study. It is assumed that the electric generating capacity requirements for natural gas, coal, and uranium production shown in Table 5-5, Required Indirect Electrical Generation Capacity, may be met from existing capacity within the region coupled with transmission of electricity from outside the region. Therefore, it is assumed that there is no additional population needed to support the thermoelectric power for these resources.

4.1 NATURAL GAS

Natural gas exploration and production will continue to support a large number of jobs in the study area. The AGNC study projected the total number of direct jobs in northwest Colorado associated with drilling new wells and maintaining and working at existing wells and necessary infrastructure, while accounting for anticipated in-commuting from residents of other areas such as southern Wyoming and northeastern Utah. The study also estimated the secondary (indirect) employment effects of natural gas development due to the procurement of goods and services by gas producers, their subcontractors and employees.

Based on meetings with industry representatives, the AGNC study determined that gas-related employment could best be projected by dividing the workforce into two components: drilling and on-going maintenance. Drilling-related employment is estimated at approximately 35 workers per well, with that number gradually diminishing as the more efficient newer rigs replace older rigs. Maintenance-related employment, including work-over crews, pumpers and manpower for the gas plants, is estimated to require about one worker per six completed wells.

The socioeconomic results of the AGNC study were extrapolated to project the total jobs, population and households associated with the maximum production level under the High Production scenario. The high production scenario extends further into the future than the AGNC study and adds additional well development in Moffat County. The high production scenario for natural gas is estimated to support about 26,000 direct and secondary (indirect) jobs in the northwest Colorado region and a population of about 50,000 residents. This population corresponds to approximately 20,500 households. The low and medium production scenarios and the near-term and mid-term planning horizons result in smaller employment, population and household growth than the long-term high production scenario described above. Total additional energy-related population projections for the natural gas industry are summarized in Table 4-1, Natural Gas Industry Energy-Related Population Projections.

Table 4-1. Natural Gas Industry Energy-Related Population Projections*

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	29,000 to 42,000	29,000 to 46,000	30,000 to 48,000
Mid-Term (2018–2035)	37,000 to 42,000	45,000 to 48,000	48,000 to 51,000
Long-Term (2036–2050)	27,000 to 36,000	36,000 to 46,000	40,000 to 50,000

*For purposes of estimating indirect water demands, the energy-related population includes the direct workforce and indirect workforce supported by the industry and the employees' dependents.

The total indirect water demands were calculated by applying the energy-related population projections as shown above in Table 4-1 with a per capita water demand value of 200 gpcd (Table 4-2, Indirect Natural Gas Water Demands). The maximum indirect water demand resulting from the additional jobs and resulting population growth for the High Production scenario is approximately 11,400 acre-feet per year. The electric generating capacity requirements for natural gas production are assumed to be met from existing capacity within the region coupled with transmission of electricity from outside the region.

Table 4-2. Indirect Natural Gas Water Demands (values in acre-feet/year)

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	6,600 to 9,400	6,600 to 10,200	6,700 to 10,800
Mid-Term (2018–2035)	8,300 to 9,400	10,000 to 10,800	10,900 to 11,400
Long-Term (2036–2050)	6,100 to 8,200	8,100 to 10,300	8,900 to 11,100

4.2 COAL

Coal production will continue to be a source of relatively stable, long-term employment in the Study area. The recent AGNC study estimated the total number of direct jobs in northwest Colorado associated with current coal production levels. The study also estimated the secondary (indirect) employment effects of coal mining due to the procurement of goods and services by coal mining operations and their suppliers and employees.

Under the long-term, high production scenario, coal production in 2050 would be about 170 percent greater than current (2006) production levels. This study took the total jobs, population and households associated with current coal production levels information from the AGNC study and projected those variables for 2050 under the high production scenario. These figures include anticipated employment at a coal liquefaction or gasification facility in the long-term under the high production scenario. This corresponds to approximately 4,300 households.

The medium and low production scenarios and for the near-term and mid-term planning horizons result in smaller employment, population, and household growth than the long-term high production scenario described above.

The total indirect water demands were calculated by applying the energy-related population projections as shown in Table 4-3, Indirect Coal Industry Energy-Related Population Projections, with a per-capita water demand value of 200 gpcd (Table 4-4, Indirect Coal Industry Water Demands). The indirect water demands resulting from the additional jobs and resulting population growth for the High production scenario would be approximately 2,400 acre-feet per year. The electric generating capacity requirements for coal production are assumed to be met from existing capacity within the region coupled with transmission of electricity from outside the region.

Table 4-3. Indirect Coal Industry Energy-Related Population Projections*

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	4,500 to 5,100	4,500 to 6,500	4,500 to 6,500
Mid-Term (2018–2035)	5,100	6,500	6,500
Long-Term (2036–2050)	5,100	6,500	10,500

*For purposes of estimating indirect water demands, the energy-related population includes the direct workforce and indirect workforce supported by the industry and the employees' dependents.

Table 4-4. Indirect Coal Industry Water Demands (all values in acre-feet/year)

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	1,100	1,400	1,400
Mid-Term (2018–2035)	1,100	1,400	1,400
Long-Term (2036–2050)	1,100	1,400	2,400

4.3 URANIUM

Compared to natural gas, coal, and oil shale, uranium mining and milling under all of the production scenarios would require relatively few workers. The AGNC study estimated that typical direct employment is about 10 workers per mine. The last operating mill in Colorado employed less than 90 people (BBC 2008).

Given these relatively low indirect effects, the indirect water demands associated with jobs, population and households supported by the one or two uranium mines in various production scenarios are not be significant. The electric generating capacity requirements for uranium production are assumed to be met from existing capacity within the region coupled with transmission of electricity from outside the region.

4.4 OIL SHALE

A report by the Canadian Energy Research Institute (CERI) demonstrates the economic impact of oil sands development in Alberta. The report estimates that between 2000 and 2005, oil sands activities supported an average of 108,000 jobs per year in Alberta, including direct and indirect employment. Between 2016 and 2020, this number is expected to increase to about 240,000 jobs. In the absence of specific information about how a large scale commercial oil shale industry in Colorado might develop, the Alberta experience is the most relevant example involving a somewhat comparable resource and similar magnitude of development. The AGNC study team used CERI estimates to determine the total number of direct jobs associated with oil sands development and production. Based on this analysis, between 2000 and 2005, approximately 27,400, or about 25 percent of the 108,000 jobs supported by oil sands activities are considered direct development and production jobs. Between 2016 and 2020, average annual direct employment is expected to reach 71,600 jobs (CERI 2007).

Commercial oil shale production would create a large number of jobs in the study area. The recent study completed by the AGNC analyzed the socioeconomic effects of potential commercial oil shale development based on a scenario derived from the Alberta experience. The AGNC study projected the total number of direct oil shale construction and operations jobs that would be held by residents of the region, while accounting for anticipated in-commuting from residents of other areas such as southern Wyoming and northeastern Utah. The study also estimated the secondary (indirect) employment effects of oil shale development due to the procurement of goods and services by oil shale firms and their employees, additional electricity generation to serve oil shale facilities and other related economic activities. All of these impacts are assessed as part of this section.

The results of the AGNC study (which considered production of 550,000 bpd by 2035) were used to project the total jobs, population and households associated with the maximum production level under the high production scenario in the long-term (about 1.5 million bpd). Including jobs in electric generation and fuel production (natural gas or coal) that level of production would support a population of over 94,200 residents. Note that these projections for the 1.5 million-bpd high production scenario do not consider potential limitations on the population and housing capacity in the region, which could lead to a larger proportion of the employees living outside of northwest Colorado and driving long distances to work at oil shale-related facilities or increased secondary population to support development.

The medium or low production scenarios and the near-term and mid-term planning horizons would result in smaller employment, population and household growth than the long-term high production scenario. Total workforce population (including population to support the electrical generation capacity for oil shale) projections for the oil shale industry are summarized in Table 4-5, Oil Shale Industry Energy-Related Population Projections.

Table 4-5. Oil Shale Industry Energy-Related Population Projections*

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	400 to 3,000	400 to 3,000	400 to 3,000
Mid-Term (2018–2035)	400 to 3,000	6,900	43,200
Long-Term (2036–2050)	400 to 3,000	17,500	94,200

*For purposes of estimating indirect water demands, the energy-related population includes the direct workforce and indirect workforce supported by the industry and the employees' dependents, including the population to support the electrical power generation.

The total indirect water demands were calculated by applying the energy-related population projections as shown in Table 4-5, with a per-capita water demand value of 200 gpcd (Table 4-6, Indirect Oil Shale Industry Water Demands). The indirect water demands resulting from the additional jobs and resulting population growth for the high production scenario would be approximately 21,100 acre-feet per year.

Table 4-6. Indirect Oil Shale Industry Water Demands (all values in acre-feet/year)

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	700	700	700
Mid-Term (2018–2035)	700	1,545	9,680
Long-Term (2036–2050)	700	3,920	21,100

The large increases in electric generation capacity needed for oil shale under the medium and high production scenarios would likely require the construction and operation of new generating facilities. Consequently, there would be additional jobs, and additional population, associated with these increased electrical demands.

In the AGNC study, BBC estimated that developing approximately 7,000 megawatts (MW) of new gas-fired capacity to provide power for a 550,000-bpd oil shale industry (similar to the mid-term assumptions for the high Production Scenario in this study) would require an ongoing construction workforce of nearly 1,300 people over a period of 10 years or more. This construction workforce would have the capability of developing an average of 635 MW of new capacity each year. The AGNC study assumed a portion of the construction workforce would likely commute from nearby areas in Utah and Wyoming that are outside the study area. The AGNC study also estimated the operating and maintenance (O&M) workforce for new gas-fired generation at approximately one worker per 10 MW of new capacity.

Table 4-6 includes the construction and operating direct worker requirements for new generation to serve oil shale under each of the production scenarios and time frames examined in this study.

In addition to the direct workforce need to build and operate new power plants, construction and O&M activities would also support an indirect workforce to provide goods and services to the power plants and to the direct workforce and their households. Based upon the relationships developed in the AGNC study between direct jobs and indirect jobs and between total jobs and total population, Table 4-6 includes the projected energy-related population associated with new generation to serve oil shale under each production scenario. Table 4-6 counts only the workers who are expected to live within the study area.

Each energy industry will require electrical demands associated with their respective production technologies. There are three primary energy resources that generate electric power in the United States including; coal, natural gas, and nuclear, accounting for 49.0, 20.0 and 19.4 percent of the total electric power net generation, respectively, in 2006 (EIA 2006a).

Generation facilities using fossil fuels and nuclear energy require cooling systems to condense steam turbine exhaust. The easiest and most economical method to condense steam is to use cooling water. The amount of cooling water used depends on the type of generation and cooling facilities as well as the ambient meteorological conditions at the power plant (DOE 2006a). The two main types of water-cooled systems are closed loop cooling towers and open loop[39]. Closed loop cooling towers circulate the steam turbine exhaust through evaporative-cooling towers. Open loop cooling systems return the water used for cooling back to the source. This results in a thermal increase in the source water which induces higher evaporation rates and causes thermal pollution.

5.1 THERMOELECTRIC POWER BACKGROUND

All of the energy sectors discussed in this report will generate electrical demands attributable to:

1) The power required to operate machinery, equipment, facilities, etc. associated with the extraction and production of the energy resource.
2) The power required to sustain the resulting increase in municipal electrical demands attributable to the direct and indirect worker populations.

For the purposes of this study it was assumed that the increase in electrical demands will be supplied by thermoelectric power generation facilities. Thermoelectric power generation is a water-intensive process and depends on the type of generation facility. The three primary types of thermoelectric power generation facilities in the United States are coal, natural gas, and nuclear accounting for 49.0, 20.0 and 19.4 percent, respectively, of total electric power generation in 2006 (EIA 2006a).

[39] If the ambient atmosphere conditions allow, air-cooled towers can also be used. However documentation indication the implementing of this type of cooling system in the study area was not ascertained during the study.

Thermoelectric power generation facilities using fossil fuels and nuclear fuel require cooling systems to condense steam turbine exhaust. The easiest and most economical method to condense steam is to use cooling water. The amount of cooling water required depends on the type of generation and cooling facilities as well as the ambient meteorological conditions at the power plant (DOE 2006a). The two main types of water-cooled systems are closed loop cooling towers and open loop[40]. Closed loop cooling towers circulate the steam turbine exhaust through evaporative-cooling towers. Open loop cooling systems return the water used for cooling back to the source. This results in a thermal increase in the source water which induces higher evaporation rates and causes thermal pollution.

There are currently three coal-fired electric power generation plants located within the study area. One located in Craig, Colorado, has a net generation export capacity of approximately 1,300 MW. The second, located in Hayden, Colorado, has a capacity of approximately 465 MW. The third is located in Cameo, Colorado, with a capacity of 77 MW. A recent Xcel Energy Report (November, 2007) reported that they will be retiring the coal-fired Cameo power plant in the study area by 2010, therefore it was assumed that this plant would not provide any additional power needed to support the energy resources in the study area.

The unit water demands associated with the electric power demands are based on information obtained from representatives familiar with the operation of the Craig plant[41]. According to these sources, the annual water demands at this facility are approximately 15,000 acre-feet, for a total net generation (in 2007) of approximately 10 million megawatt-hours (MWh)[42]. This equates to a water use rate of 0.48 gallons per kilowatt-hours (KWh).

Every few years, Xcel and other electric power generation companies go through a process to assess the resources necessary to serve customers' future energy needs. Resource plans are reviewed and approved by regulatory commissions, and stakeholders must be given the opportunity to provide input on the plans. As these plans are updated and modified, so will the future of the thermoelectric power generation.

[40] If the ambient atmosphere conditions allow, air-cooled towers can also be used. However documentation indication the implementing of this type of cooling system in the study area was not ascertained during the study.
[41] Interview with Tri-State
[42] 10 million Mega-Watt hours equates to approximately 90% of the capacity.

The following sections describe the different direct electric power demands for natural gas, coal, uranium, and oil shale.

5.2 ELECTRIC POWER DEMANDS FOR NATURAL GAS

The activities within the production phase of natural gas production, not the drilling phase, drive the need for electric power[43]. These production-related activities include:

- **Pipeline Transmission –** The power demands for pipeline transmission are a result of pressurizing stems for the compression of natural gas. Once gas leaves the well,[44] it is expanded, resulting in the cooling of the gas and condensing of liquids such as water and natural gas condensate. The gas is then re-pressurized for distribution to the treatment facilities. The power demand for this process is approximately 1.5 KWh/Mcf[45]. A majority of the existing pipeline compressor stations are supplied by natural gas-fired generators and not electrical power through the grid. For the purposes of this study, it was assumed that half of future pipeline compressor stations will be supplied by electricity from the grid[46].
- **Treatment Facility Operations –** Gas is sent to treatment facilities for final treatment before distribution to consumers. Based on interviews with industry representatives familiar with the ExxonMobil Central Treatment Facility associated with the Piceance Development Project, the power used for processing is approximately 3.6 KWh/Mcf[47]. This includes the electrical demands required for the final stage of compression of gas into regional distribution pipelines.

Table 5-1, Electrical Power Demands by Resource, provides a summary of the power requirements needed for the natural gas industry.

[43] Currently, the vast majority of natural gas well pads obtain power from on-site diesel generators. This is due to the oftentimes remote location of pads as well as the temporary nature of the majority of activities taking place on well pads. It takes approximately 6 months to drill wells on a pad. After this period of time the pad is in production phase and activities on the pad are drastically downsized.
[44] Well head pressures in the study area are approximately 1,000 pounds per square inch.
[45] Calculation – Suction pressure =100; discharge pressure = 400;
[46] Fred Eggelston, Xcel
[47] 30 MW per 200 Mcf/day

Table 5-1. Electrical Power Demands by Resource

Industry	Electric Power Requirement
Natural Gas	Pipeline Operations: 1.5 KWh/Mcf Processing and Treatment: 3.6 KWh/Mcf
Coal	Underground Mining: 24 KWh/ton (handling and processing)
Uranium	Underground Mining: 18.5 MWh/ton[48] (ore handling and processing)
Oil Shale	Underground Mining w/ Surface Retort 75 KWh/bbl (includes mining). Shell ICP: 300 KWh/bbl (downhole heating requirement)

Notes:
bbl = barrel
ICP = In-Situ Conversion Process
KWh = kilowatt-hour
Mcf = million cubic feet

5.3 ELECTRIC POWER DEMANDS FOR COAL

The coal production activities requiring electricity include the mining, handling, and preparation of coal. Based on information obtained from representatives familiar with the proposed Red Cliff Mine, total power use at the mine is anticipated to be approximately 24 KWh/ton[49]. For the purposes of this study, the unit power use on a per ton basis for coal production was applied to all projected mining, underground and surface. This is a conservative assumption as the power use associated with surface mining is less than that of underground mining.

The electrical power requirement associated with coal gasification and liquefaction was not calculated as part of this study. Table 5-1 provides a summary of the power requirements needed for the coal industry.

5.4 ELECTRIC POWER DEMANDS FOR URANIUM

The underground uranium mining activities associated with uranium extraction were assumed to be similar to that of underground mining activities associated with coal[50]. Regardless of the unit value used, the highest forecasted rate of uranium production in this study includes the handling

[48] Assumed the power requirement to handle/process one ton of uranium ore is similar to one ton of coal and applied a uranium ore grade of 0.13 percent.
[49] 69 KV power line, 8 million tpy production.
[50] Power use associated with underground mining activities was assumed to be similar for different minerals.

of approximately 150,000 tons of ore per year, roughly 0.8 percent of the mined tonnage of coal at current production rates in the study area.

5.5 ELECTRIC POWER DEMANDS FOR OIL SHALE

The power requirements associated shale oil production depends on the specific type of retort process used, surface retort or in-situ retort.

- **Surface Retort –** The power requirements associated with the surface retort process for oil shale is estimated to be approximately 40 to 55 KWh/bbl[51] (Bunger 2004). These electrical demands are associated with the power needed to supply motor drives for ore preparation and retort units. The Office of Technology Assessment (OTA) estimated a slightly lower range of power that varied as a function of peaking factor used, 20 to 40 KWh/bbl for a 50,000-bpd[52] surface retort facility. It is uncertain though if underground mining was included in this estimate (OTA 1980).
- For the purposes of this study, the power requirement demands for underground mining was assumed to be similar to coal mining, 38 KWh/bbl assuming a shale oil yield of 26.5 gallons per ton. The mid range of values discussed above for surface retort was assumed for a total power requirement of 75 KWh/bbl.

In-Situ Retort – A power requirement of 300 KWh/bbl of produced shale oil was used based on the information detailed in *Oil Shale Development in the United States* produced by the Rand Corporation (Bartis 2006).

5.6 SUMMARY OF THE DIRECT ELECTRIC DEMANDS

The basis for calculating the water demands for thermoelectric power generation is obtained through a series of assumptions described above for each resource. The resulting power demands for each resource are provided in Table 5-1.

The electric power demands shown in Table 5-1 were used as the basis to calculate the projected annual electric power use (consumption) for natural gas, coal, uranium and oil shale for the three

[51] Calculated assuming 26.5 gal/ton oil shale. Cited reference estimated 25 – 30 KWh/ton.

production scenarios discussed in Section 3 (Table 5-2, Projected Annual Direct Electric Power Use).

Table 5-2. Projected Annual Direct Electric Power Use (all values in GWh)

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	Natural Gas: 2,785 Coal: 492 Uranium: 0 Oil Shale: 0	Natural Gas: 2,869 Coal: 492 Uranium: 2 Oil Shale: 0	Natural Gas: 2,976 Coal: 492 Uranium: 2 Oil Shale: 0
Mid-Term (2018–2035)	Natural Gas: 3,785 Coal: 492 Uranium: 0 Oil Shale: 0	Natural Gas: 4,645 Coal: 624 Uranium: 2 Oil Shale: 4,106	Natural Gas: 5,041 Coal: 624 Uranium: 2 Oil Shale: 56,119
Long-Term (2036–2050)	Natural Gas: 3,281 Coal: 492 Uranium: 0 Oil Shale: 0	Natural Gas: 4,184 Coal: 624 Uranium: 2 Oil Shale: 17,794	Natural Gas: 4,586 Coal: 720 Uranium: 4 Oil Shale: 165,619

Note: The values presented correspond to the production level reached at the end of the respective planning horizon.

The electrical generation capacity attributable to the annual power use (Table 5-2) was then estimated (Table 5-3, Required Annual Direct Electrical Generation Capacity). The electrical generation capacity estimates in Table 5-3 do not include a peaking factor, which will result in a greater capacity. They are simply estimated based on the annual power use (consumption) as presented in Table 5-2. It was assumed that this generation capacity remains mostly constant throughout the year.

5.7 INDIRECT THERMOELECTRIC POWER DEMANDS

In 2001 the EIA conducted a Residential Energy Consumption Survey. The annual average per capita household electrical energy consumption within the Mountain Region provided in the survey was 9,926 kWh (EIA 2001). This value was used to calculate the increase in electrical demands attributable to the energy-related population projections discussed in Section 4.

[52] OTA (1980) estimated an on-site generating capacity of 85 MW would be needed to serve the Colony Project using the TOSCO II retort technology.

Table 5-4, Projected Annual Indirect Electric Power Use, presents the projected annual power consumption attributable to the workforce populations

Table 5-3. Required Annual Direct Electrical Generation Capacity (all values in MW)

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	Natural Gas: 318 Coal: 56 Uranium: 0 Oil Shale: 0	Natural Gas: 327 Coal: 56 Uranium: 0.2 Oil Shale: 0	Natural Gas: 340 Coal: 56 Uranium: 0.2 Oil Shale: 0
Mid-Term (2018–2035)	Natural Gas: 432 Coal: 56 Uranium: 0 Oil Shale: 0	Natural Gas: 530 Coal: 71 Uranium: 0.2 Oil Shale: 469	Natural Gas: 575 Coal: 71 Uranium: 0.2 Oil Shale: 6,406
Long-Term (2036–2050)	Natural Gas: 375 Coal: 56 Uranium: 0 Oil Shale: 0	Natural Gas: 478 Coal: 71 Uranium: 0.2 Oil Shale: 2,031	Natural Gas: 524 Coal: 82 Uranium: 0.4 Oil Shale: 18,900

Note: The values presented correspond to the production level reached at the end of the respective planning horizon.

Table 5-4. Projected Annual Indirect Electric Power Use (all values in GWh)

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	Natural Gas: 171 Coal: 21 Uranium: 0 Oil Shale: 12	Natural Gas: 187 Coal: 26 Uranium: 0 Oil Shale: 12	Natural Gas: 195 Coal: 26 Uranium: 0 Oil Shale: 12
Mid-Term (2018–2035)	Natural Gas: 171 Coal: 21 Uranium: 0 Oil Shale: 12	Natural Gas: 195 Coal: 26 Uranium: 0 Oil Shale: 28	Natural Gas: 207 Coal: 26 Uranium: 0 Oil Shale: 176
Long-Term (2036–2050)	Natural Gas: 146 Coal: 21 Uranium: 0 Oil Shale: 12	Natural Gas: 187 Coal: 26 Uranium: 0 Oil Shale: 71	Natural Gas: 203 Coal: 43 Uranium: 0 Oil Shale: 383

Note: The values presented correspond to the production level reached at the end of the respective planning horizon.

The generation capacity attributable to the annual power use as shown in Table 5-5, Required Annual Indirect Electrical Generation Capacity, was then estimated in the same fashion as discussed previously for Table 5-2.

Table 5-5. Required Annual Indirect Electrical Generation Capacity (all values in MW)

Planning Horizon	Production Scenarios		
	Low	**Medium**	**High**
Near-Term (2007–2017)	Natural Gas: 20 Coal: 2 Uranium: 0 Oil Shale: 1	Natural Gas: 21 Coal: 3 Uranium: 0 Oil Shale: 1	Natural Gas: 22 Coal: 3 Uranium: 0 Oil Shale: 1
Mid-Term (2018–2035)	Natural Gas: 20 Coal: 2 Uranium: 0 Oil Shale: 1	Natural Gas: 22 Coal: 3 Uranium: 0 Oil Shale: 3	Natural Gas: 24 Coal: 3 Uranium: 0 Oil Shale: 20
Long-Term (2036–2050)	Natural Gas: 17 Coal: 2 Uranium: 0 Oil Shale: 1	Natural Gas: 21 Coal: 3 Uranium: 0 Oil Shale: 8	Natural Gas: 23 Coal: 5 Uranium: 0 Oil Shale: 44

Note: The values presented correspond to the production level reached at the end of the respective planning horizon.

5.8 SUMMARY OF TOTAL WATER DEMANDS FOR THERMOELECTRIC POWER

The water demands associated with thermoelectric power generation were estimated based on the annual power use presented in Tables 5-2 and 5-4. For the purposes of this study, water demands associated with thermoelectric power generation were estimated based on the 0.48 gallons per KWh attributable to water demands at the Craig Power plant, as discussed earlier in this section.

The use of other thermoelectric power generation facilities such as natural gas combined cycle (NGCC) and nuclear facilities will result in different water demands. The water demands presented in Table 5-6, Annual Thermoelectric Power Generation Water Demands, can be scaled by a factor of 0.3 and 2.25 to represent the water demands attributable to NGCC and nuclear facilities, respectively (DOE 2007b).

Table 5-6. Annual Thermoelectric Power Generation Water Demands (all values in acre-feet)

Planning Horizon	Production Scenarios		
	Low	**Medium**	**High**
Near-Term (2007–2017)	Natural Gas: 4,354 Coal: 755 Uranium: 0 Oil Shale: 18	Natural Gas: 5,230 Coal: 764 Uranium: 3 Oil Shale: 18	Natural Gas: 5,428 Coal: 764 Uranium: 3 Oil Shale: 18
Mid-Term (2018–2035)	Natural Gas: 5,827 Coal: 755 Uranium: 0 Oil Shale: 18	Natural Gas: 8,309 Coal: 958 Uranium: 3 Oil Shale: 6,090	Natural Gas: 9,012 Coal: 958 Uranium: 3 Oil Shale: 82,925
Long-Term (2036–2050)	Natural Gas: 5,049 Coal: 755 Uranium: 0 Oil Shale: 18	Natural Gas: 7,501 Coal: 958 Uranium: 3 Oil Shale: 26,316	Natural Gas: 8,220 Coal: 1,124 Uranium: 6 Oil Shale: 244,532

Notes: Totals are applicable to coal-fired thermoelectric power generation.

The total direct, indirect, and thermoelectric water demands are provided in Table 6-1, Summary of Annual Water Demands. Table 6-1 provides the total water demands by resource for the three production scenarios across all three planning horizons.

Table 6-1. Summary of Annual Water Demands (all values in acre-feet)

Planning Horizon	Production Scenarios		
	Low	Medium	High
Near-Term (2007–2017)	Natural Gas: 18,050 Coal: 3,070 Uranium: 0 Oil Shale: 720 Total: 21,840	Natural Gas: 20,300 Coal: 3,380 Uranium: 3 Oil Shale:720 Total: 24,403	Natural Gas: 21,460 Coal: 3,380 Uranium: 65 Oil Shale: 720 Total: 25,625
Mid-Term (2018–2035)	Natural Gas: 19,200 Coal: 3,070 Uranium: 0 Oil Shale: 720 Total: 22,990	Natural Gas: 23,980 Coal: 3,900 Uranium: 65 Oil Shale: 16,220 Total: 44,165	Natural Gas: 25,690 Coal: 3,900 Uranium: 65 Oil Shale: 78,020 Total: 107,675
Long-Term (2036–2050)	Natural Gas: 15,635 Coal: 3,070 Uranium: 0 Oil Shale: 720 Total: 19,425	Natural Gas: 21,085 Coal: 3,900 Uranium: 65 Oil Shale: 104,250 Total: 129,300	Natural Gas: 23,010 Coal: 8,590 Uranium: 130 Oil Shale: 378,310 Total: 410,040

Figures 6-1, Total Annual Water Demands, and 6-2, Percentage of Total Annual Water Demands, show a graphical representation of the information provided in Table 6-1. Figure 6-1 indicates the amount of annual water demand per energy resource for the three different production scenarios for the near, mid- and long-term planning horizons, indicating the largest water demand is attributable to the development of oil shale for the medium and high production scenarios for the mid- and long-term scenarios.

Figure 6-2 shows the distribution of the water demands among the four energy resources for the three different production scenarios and planning horizons.

Figure 6-1. Total Annual Water Demands

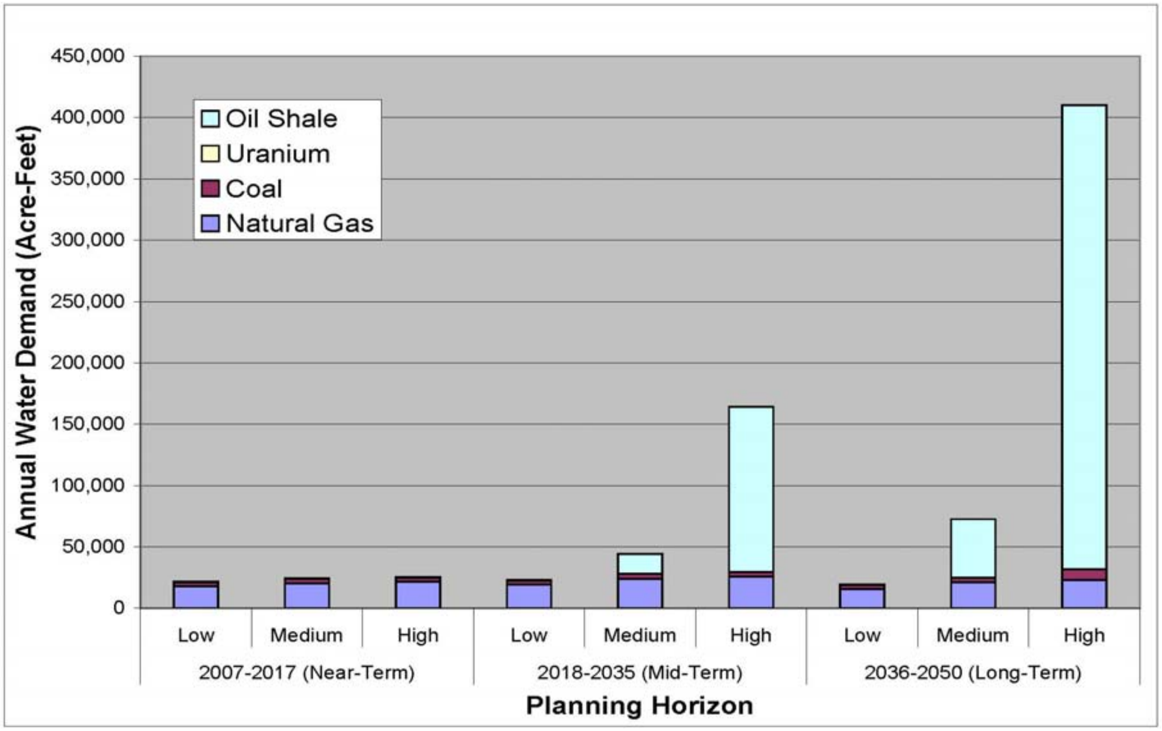
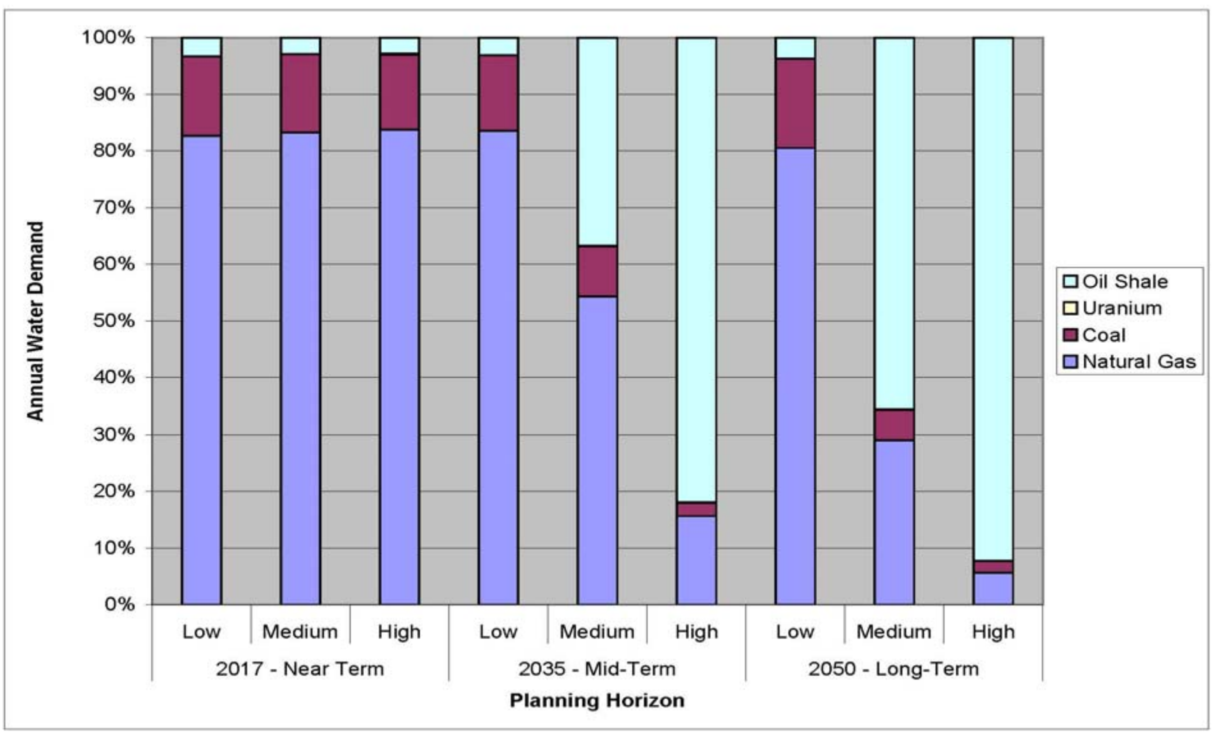


Figure 6-2. Percentage of Total Annual Water Demands



Development of the natural gas, coal, uranium, and/or oil shale energy sectors is dependant upon securing an adequate water supply to meet the direct, indirect, and thermoelectric power demands for these sources of energy as described in preceding chapters within this report. Inherent within the determination of an adequate water supply is a complex and intricate water analysis that must simultaneously address both the *physical* and *legal* availability of water resources to meet the demand for additional energy production. The physical analysis includes the quantification of available water supplies in context of both direct flow (diversion) and volumetric (storage) water supplies available. The reliability, or firm yield, of these water supplies warrants detailed analysis to review the dynamic nature of water supplies that vary in season and annual yield. This temporal quantification may be based upon the review and analysis of an extended period of historical data/information that includes representative periods of wet, dry, and average hydrologic conditions. Further, securing an adequate physical water supply requires careful evaluation of the potential and different sources of water supply available to meet the anticipated demand such as streamflow diversions capture of spring snowmelt runoff or precipitation events in storage reservoirs, or pumping from tributary or non-tributary ground water aquifers.

Interpretation of the legal availability of water supplies will require a thorough analysis of applicable water right decrees and/or ground water well permits. Water rights in Colorado are segmented into two general categories: conditional water rights that have been awarded a priority date, amount, and beneficial use(s) of water through judicial decree for water supplies that may yet be developed and incorporated with administrative priority system for a tributary watershed; and absolute water rights that retain judicial recognition of the actual diversion or storage of a specified quantity of water and its subsequent application to decreed beneficial use(s).

The technical analysis into legal water availability must consider the decreed amount, location, and priority of the subject water right(s) in context with all the other water rights within a tributary river system. The analysis will include a review of the historic diversion or storage records for absolute water rights as a mechanism to quantify the amount of water consumptively used by the water right(s) in terms of the recorded minimum, maximum, average, and total diversion or storage volumes on an annual basis. In order to gauge the reliability or confidence the subject water right(s) will be allowed to divert or store in priority within a tributary stream system in the future, it is necessary to address the historic water administrative practice in the relevant tributary stream system. This activity is performed by analyzing the “river call” frequency, duration, and “depth” or “seniority” of water right(s) that have previously exercised their lawful ability to demand water administration or curtailment of “junior” water rights located upstream of their respective water diversion or storage structure within a tributary stream system. At this juncture it is important to recognize the focus of legal water availability is not limited within the confines of a specific stream system or within State of Colorado boundaries. Tributary waters in northwestern Colorado are part of the interstate Colorado River system and therefore are subject to the terms and conditions contained within the Colorado River Compact (1922) and Upper Colorado River Compact (1948).

Although a rigorous analysis of water rights, water administrative practices, and potential sources of water supply is warranted to address the potential water supply needs for energy production demands in the study area; said analysis is beyond the scope of this study and is properly deferred to investigation in the future Phase 2 analysis. The scope of work for this needs assessment study requires a review and compilation of the conditional water rights for the Colorado, Yampa, and White Rivers that can be applied toward energy development. Through an exhaustive research of the conditional water rights within these river systems, it is anticipated the majority of the conditional water rights to support energy development will come from the Colorado and White Rivers. These conditional water rights, if developed, have the potential to impact existing water rights in these river basins because their respective diversion or storage water rights will be administered in priority of their adjudication date. This date reflects the first recognizable action that formed the intent of the appropriator to secure a water right. This administrative priority date for a conditional water right is earlier or “senior” to the time when water is first applied to beneficial use or when the conditional water right is perfected to absolute status through judicial confirmation. The potential impact to existing water rights would occur to those absolute water rights that were adjudicated *after* the subject conditional water rights were awarded their priority date in a preceding court decree. It is plausible that should a sufficient number of conditional water rights perfect their decrees to absolute status through diversion/storage to beneficial use, the historic river call regime on individual tributary streams.

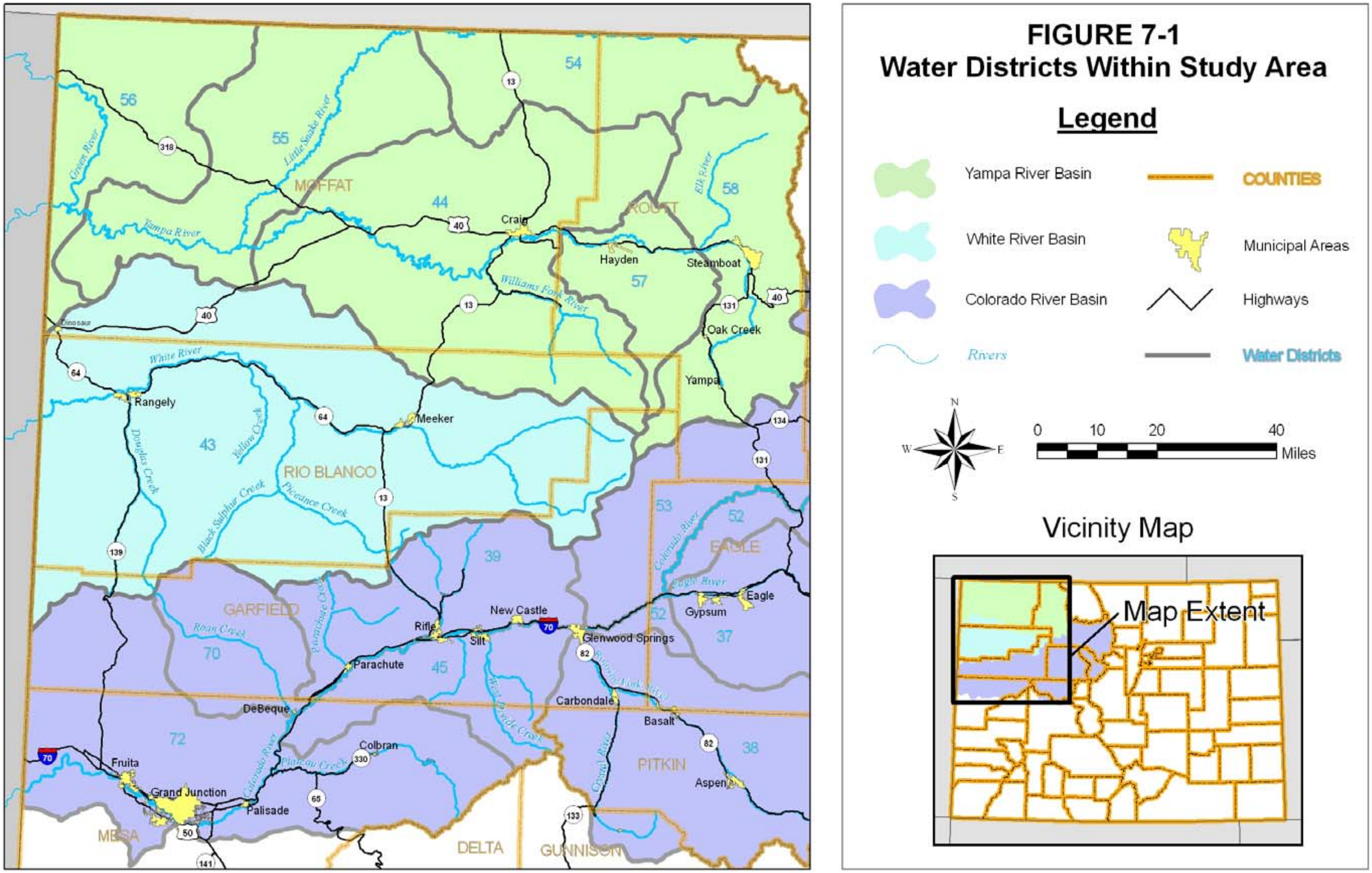


FIGURE 7-1
Water Districts Within Study Area
Legend
Yampa River Basin
White River Basin
Colorado River Basin
Rivers
COUNTIES
Municipal Areas
Highways
Water Districts
0 10 20 40 Miles
Vicinity Map
Map Extent
MOFFAT
ROUTT
RIO BLANCO
GARFIELD
EAGLE
PITKIN
MESA
DELTA
GUNNISON
Craig
Hayden
Steamboat
Oak Creek
Yampa
Dinosaur
Rangely
Meeker
New Castle
Rifle
Silt
Glenwood Springs
Gypsum
Eagle
Parachute
DeBeque
Carbondale
Basalt
Aspen
Colbran
Fruita
Grand Junction
Palisade
Green River
Yampa River
Little Snake River
Williams Fork River
Elk River
White River
Douglas Creek
Yellow Creek
Black Sulphur Creek
Piceance Creek
Colorado River
Eagle River
Roaring Fork River
Roan Creek
Parachute Creek
Divide Creek
Plateau Creek
Crystal River
56
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and the Colorado River system may be extended in duration and the historic administrative priority be shifted to require curtailment of water rights that previously were not subject to water administrative actions.

A review of existing conditional water rights was conducted for each of the Water Districts in the area of study, including District 39, District 45, District 70, and District 72 in Water Division 5, and District 43 in Water Division 6 (Figure 7-1, Water Districts in Study Area). This evaluation is a critical component within this study because this information identifies the application of conditional water rights as a potential and viable source of water supply necessary to support the energy development discussed in Section 3. Appendix A-1 provides a summary of the data collected as part of this water rights review.

The geographic area for representing conditional water rights is predominantly by Water District and Water Division, opposed to presenting water demand scenarios by county or river basin. The research performed in this study indicated the majority of the existing energy production and development is occurring in Garfield County (Water Division 5), yet is expected to shift north towards Rio Blanco County (Water Division 6) with time (BLM RFDS). This northward migration of demand for water production may include scenarios to divert surplus water from the Colorado River basin into the Yampa River basin.

The review of conditional water rights for each of the districts was extensive. The initial step for this process included a query of the Colorado's Decision Support Systems (CDSS) water right database. The query sorted all water rights with a conditional component for each Water District. The results were then divided into storage water rights, designated with volume units in acre-feet, and diversion water rights, designated with flow units of cubic feet per second (cfs). Next, the URS team met with Colorado Division of Water Resources (DWR) Water Commissioners Jim Lemon (Water Division 5, Districts 39 and 45), Dave Barry (Division 5, District 70), and Rebecca Elder (Division 6, District 43) to further sort water rights into rights that are owned by, or may likely be transferred for, energy development demands. Although, this evaluation was extensive, it is may not be considered exhaustive or conclusive. New water right appropriations or the owners of existing conditional water rights and absolute water rights may petition the Water Court for a change in point of diversion, use, or other change in water right that may impact the quantity and reliability of water rights available to support the water demands for future energy development. The final step in sorting water rights included a review the DWR internal database, Hydrobase, and a review of individual water right decrees. Said review of individual water rights included a cursory review of ownership information, including those owned by energy companies, as an indicator that the water rights were decreed for commercial or industrial beneficial uses and may be used for energy development. A review of storage and diversion for each Water District is discussed below.

7.1 DIVISION 5, DISTRICT 39

Water Division 5, District 39 is located in the Colorado River Basin, on the north side of the River extending from Glenwood Springs to mid-way between Parachute and DeBeque. A total of 18 conditional storage water rights with a total of 104,664 acre-feet of storage and 47 conditional direct flow water rights totaling 888 cfs are currently decreed to supply water for energy development in District 39.

7.2 DIVISION 5, DISTRICT 45

Water Division 5, District 45 is located in the Colorado River Basin, on the south side of the River extending from Glenwood Springs to mid-way between Parachute and DeBeque. One conditional storage water right with 2,000 acre-feet of storage and eight conditional direct flow water rights totaling 118 cfs are currently decreed to supply water for energy development in District 45.

7.3 DIVISION 5, DISTRICT 70

Water Division 5, District 70 is located in the Colorado River Basin, on the north side of the River extending from mid-way between Parachute and DeBeque to DeBeque and encompasses the entire Roan Creek watershed. A total of 13 conditional storage water rights totaling 166,930 acre-feet of storage and 56 conditional direct flow water rights totaling 469 cfs are currently decreed to supply water for energy development in District 70.

7.4 DIVISION 5, DISTRICT 72

Water Division 5, District 72 is located in the Colorado River Basin, on the north side of the River extending from DeBeque to the Utah state line. A total of three conditional storage water rights totaling 176 acre-feet of storage and eight conditional direct flow water rights totaling 513 cfs are currently decreed to supply water for energy development in District 72.

7.5 DIVISION 6, DISTRICT 43

Water Division 6, District 43 is located in the White River Basin, encompassing the entire White River watershed to the Utah state line. A total of 25 conditional storage water rights totaling 333,717 acre-feet of storage and 83 conditional diversion water rights totaling 2,344 cfs are currently decreed to supply water for energy development in District 43.

Table 7-1, Summary of Conditional Water Rights, summarizes the conditional water rights for storage and diversion records, respectively, for each Water District.

Table 7-1. Summary of Conditional Water Rights

Water District	Number of Direct Flow Water Rights	Total Conditional Direct Flow Rate (cfs)	Number of Conditional Storage Water Rights	Total Conditional Storage Volume (acre-feet)
Division 5, District 39	47	888	18	104,664
Division 5, District 45	8	118	1	2,000
Division 5, District 70	56	469	13	166,930
Division 5, District 72	8	513	3	176
Division 6, District 43	83	2,344	25	333,717
Totals	**202**	**4,332**	**60**	**607,486**

For comparative and illustrative purposes, Table 7-2, Summary of Net Absolute Water Rights, summarizes the absolute direct flow and storage water rights for each water district. The table includes the total number of absolute water rights and net amount of water adjudicated to each structure. Further, the number and net quantity of water rights with decreed beneficial uses such as commercial, industrial, and power are depicted in parenthesis.

Table 7-2. Summary of Net Absolute Water Rights (including both the Total Number and Energy Portion of the Total, in parentheses)

Water District	Total Absolute Direct Flow Rights	Total Absolute Direct Flow Rate (cfs)	Number of Absolute Storage Water Rights	Total Absolute Storage Volume (acre-feet)
Division 5, District 39	1,465 (157)	1,765 (173)	91 (43)	35,700 (13,077)
Division 5, District 45	1,125 (61)	1,618 (103)	123 (31)	2,381 (717)
Division 5, District 70	454 (76)	461 (12)	10 (7)	49 (5)
Division 5, District 72	1,555 (131)	8,321 (2,911)	481 (99)	78,182 (49,854)
Division 6, District 43	2,734 (151)	4,423 (1,196)	336 (42)	30,043 (17,994)
Totals	**7,333 (576)** **≈8% of the Total are Energy Related**	**16,588 (4,395)** **≈26% of the Total are Energy Related**	**1,041 (222)** **≈21% of the Total are Energy Related**	**146,355 (81,646)** **≈56% of the Total are Energy Related**

Notes:
≈ = approximately
% = percent
cfs = cubic feet per second

The roundtable process created as part of the HB 05-1177, identified the need to assess the quantity of water needed to support the development of the available energy resources on the Western Slope within the Colorado, Yampa and White river basins. The URS Team was retained to conduct Phase 1 of the Energy Needs Water Demand Assessment, which focused primarily on defining a range of scenarios for near-, mid- and long-term planning horizons to support the future water demand analysis for the energy development sectors and on-going water planning projects. Although the scope of this study did not include a comprehensive analysis of the total energy development demand/supply situation, it does provide the needed information to assist State and local water supply and development review agencies in their planning and deliberative processes to evaluate the potential regional water supply impacts of energy development. This study serves as the foundation to identify potential sources of water supply, and changes in existing water rights and water administration practices, necessary to address the demands for energy development in future investigations.

Overall, the results from the Phase 1 evaluation will assist with the further development of the Grant objectives in Phase 2, specifically exploring the various alternatives to identify and quantify reliable water supplies to meet the energy sector's increasing water demands.

As a result of the research conducted in Phase 1, a dominant finding is oil shale development, along with its associated power production, could require tremendous amounts of water, up to 378,300 acre-feet annually. Additional conclusions that can be drawn as a result of Phase 1 of this study include:

- The amount of water required for natural gas, coal, and uranium, including the associated population growth to support these industries, is significant but appears to be within the realm of water supplies available for planning and development.
- The amount of power generation needed to serve the oil shale industry in the long-term and high production scenario, including the population growth, is extremely high and is approximately 19,000 MW, more than 14 times the size of the largest power plant in Colorado (Craig Station).
- The indirect water needs for oil shale development could exceed the direct water demands, assuming thermoelectric power would be supplied by coal-fired power plants in the study area. These demands could be reduced by approximately two-thirds if natural gas-fired generation facilities were used. Water demands could more than double if they were met using nuclear power facilities.
- Many industries located in the study area have extensive portfolios of conditional water rights, many of which are senior to existing absolute water rights. Development and perfection of conditional water rights could require administrative curtailment of junior absolute water rights and their application to existing beneficial uses of water.

Recommend Phase 2 be implemented and it should address potential sources of water supply, including new water projects if needed, to meet the water demands forecasted in Phase 1. It is further recommended that Phase 2 qualify the net consumptive use of waters supplies contemplated for use in the energy sectors, including addressing the timing, location, and magnitude of return flows resulting from water use attributable to energy development in order to estimate the effects energy development may have on vested water rights and in stream flows.

In addition the integration of the conclusions from Phase 1, Phase 2 should also incorporate findings and conclusions available from parallel investigative studies (example: SWSI) or serve to provide data and information in the pending Colorado Water Availability Study.

The leadership provided by officials of the Department of Natural Resources, CWCB, and the Colorado, Yampa, and White River Basins Roundtables, including the Energy Subcommittee, represents a keen awareness and insight into the advancing need to identify and quantify the demands for reliable water supplies for the energy production industry in northwest Colorado. This study, through rigorous analysis and concise documentation, provides the initial answers to the energy production needs assessment and establishes the foundation for successive investigations to identify potential sources of water supply to meet those advancing water requirements. It is highly recommended that the investigative process be extended to the second phase. This continued investigation should be conducted in a manner that complements and supports coincident water supply/demand studies, requiring empirical research and documentation of the physical and legal water supplies available to meet energy production demands in northwestern Colorado in concise qualitative and quantitative terms. The data and information provided through this continued investigations is an absolute requisite to assist local, regional, and state officials in making informed decisions and exercising wise stewardship of Colorado's precious water resources.

The future of the oil shale, natural gas, coal and uranium extraction and production is greatly unknown and will continue to evolve with the changing market conditions. Demands for the energy and associated price levels may also lead to periods of faster or slower development within the region and corresponding fluctuations in local retail sales, employment and fiscal conditions. Although all current indications suggest, that for gas development, the market will be ongoing for the next several decades it remains possible that unforeseen changes in markets, replacement supply sources or other factors could curtail development sooner than expected.

This study provides a good basis to build upon for future water supply planning needs; however, it needs further analysis and modeling to understand the geographical impacts of this information within the Colorado, Yampa, and White river basins. As additional phases of this study continue, it is important to recognize the assumptions supporting each of the scenarios and to maintain as much consistency as possible with concurrent and related studies.

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Personal communications regarding gpcd, July 2008:

- City of Grand Junction, Mr. Greg Trainor, email to Energy Subcommittee, July 29, 2008.
- City of Rifle, Colorado, Mr. Charlie Stevens, email to Energy Subcommittee, July 28, 2008.
- Town of Clifton, Colorado, Mr. Dennis Carlson, phone correspondence with Ms. Angie Fowler, URS Corporation, July 23, 2008.

Personal communications with industry representatives, January 2008 – August 2008:

- Natural Gas Processor's Association based in Tulsa, Oklahoma. Phone conversation with Mr. Kenny Wheat regarding water demands associated with processing and pipeline operations.
- COGCC NW area Engineering Supervisor. E-mail correspondence with Mr. Jaime Adkins concerning water demands associated with processing and pipeline operations.
- Natural Gas Industry Analyst, Energy Information Administration. E-mail correspondence with Mr. James Tobin, concerning water demands associated with processing and pipeline operations.
- Washington Group, Intl. for Oil, Gas, and Chemicals. Telecommunication with Mr. Scott Swanson, Project Coordinator, concerning water and power demands associated with the Central Treatment Facility currently under construction in the Piceance Basin by Enterprise on behalf of ExxonMobil.
- Washington Group, Intl. for Oil, Gas, and Chemicals. E-mail correspondence with Mr. James Young, concerning water demands associated with processing and pipeline operations.
- URS Corporation. E-mail and telecommunication with Mr. Darrell Poteet, Project Director, Midstream Pipeline Operations, concerning water and power demands associated with midstream pipeline operations.
- Strategic Center for Natural Gas and Oil, U.S. Department of Energy, National Energy Technology Laboratory. E-mail and telecommunication with Mr. Robert Vagnetti, Researcher, regarding water demands associated with in-situ and surface retort of oil shale.
- EG & G Technical Services. Correspondence with Mr. James Covell, Researcher, regarding unconventional energy development technologies.
- National Oil Shale Association. Meeting with Mr. Glen Vawter, to review assumptions pertaining to Oil Shale Retort technologies.
- Noble Energy. Discussions with Mr. Mike Bonkiewicz, District Manager, regarding water demands for pipeline, treatment, and frac'ing operations.

- PDC. E-mail correspondence with Mr. Jeff Jackson, Compressor Facilities Operator, concerning water demands associated with processing and pipeline operations.
- Dalbo, Inc. Rifle, Colorado.
- URS Corporation. Discussions with Mr. Bill Killam, Red Cliff Mine Project Manager, regarding the (draft, under agency review) Red Cliff Mine EIS.
- JE Stover & Associates. Grand Junction, Colorado.
- Colorado Geological Survey. Telecommunication with Chris Carroll regarding Colorado Coal Resources. Telecommunication with Genevieve Young regarding Colorado Natural Gas Resources. Correspondence with Jim Burnell regarding Colorado uranium resources.

Appendix A-1

Summary of Conditional Water Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
WARE AND HINDS DITCH	D	MAIN ELK CREEK	39	NE	NE	NE	36	5	S	91	W	S	IA		1.592	11/15/1897	11/9/1897	4/18/1896	17480.1691	687	155	Richard Murr
LEWIS NO 1 DITCH	D	CANYON CREEK	39		SW	SW	19	5	S	89	W	S	I	0.44	0.16	11/22/1905	11/15/1905	6/1/1895	20407.16588	608	CA1148	Rosemarie Gloss
JOHNSON DITCH	D	CANYON CREEK	39		NW	SW	25	5	S	90	W	S	I	0.4	0.5	3/6/1906	11/22/1905	5/21/1889	20414.14386	599	143D	Johnson Wolverton Ditch Co
MINGS CHENOWETH WOLVERTO	D	CANYON CREEK	39		SW	NW	24	5	S	90	W	S	I	4.4	0.6	03/15/06	03/06/06	6/4/1886	20518.13304	618	74B	Greg and Jill McKennis
DEWEESE DITCH	D	CANYON CREEK	39		NW	SW	1	5	S	90	W	S	ID	2.7	1.3	03/16/06	03/15/06	11/15/1897	20527.17486	548	156	WHI Inc
BAXTER NO 2 DITCH	D	CANYON CREEK	39		SW	NW	12	5	S	90	W	S	I	1.2	0.7	06/07/06	03/16/06	4/30/1883	20528.12173	506	8A	Eric Williams
BAXTER NO 5 DITCH	D	CANYON CREEK	39		SW	NW	12	5	S	90	W	S	I	2	1.8	06/07/06	03/16/06	5/1/1903	20528.19478	895	167	Eric Williams
MCKEAL NO 3 DITCH	D	GOVERNMENT CREEK	39			NW	6	5	S	93	W	S	I	0.36	0.34	07/01/07	05/27/07	4/15/1903	20965.19462	723	166	Aaron Woodward
RILEY DITCH	D	PARACHUTE CREEK	39	NE	NE	NE	4	6	S	96	W	S	ID	0.5	0.3	04/16/09	02/04/09	7/1/1888	21584.14062	651	141A	UNOCAL
DAVIE DITCH	D	RIFLE CREEK	39			SE	7	5	S	92	W	S	I	8.66	5.88	12/8/1911	11/22/1911	3/23/1909	22605.21631	547	176A	Silt Water Conservancy District
SILT PIPELINE	L	COLORADO RIVER	39	SW	SE	NE	10	6	S	92	W	S	MFD	1.17	0.33	03/28/40	01/09/37	2/1/1939	32538	868	DOM 9	Town of Silt
OASIS DITCH	D	OASIS CREEK	39	SE	SE	SE	35	5	S	89	W	S	I		2.38	01/11/43	03/28/40	9/19/1942	33864	632	223	City of Glenwood Springs
RIFLE TOWN OF PUMP & PL	P	COLORADO RIVER	39	NE	SW	NE	15	6	S	93	W	S	MFD	7.5	7.5	09/05/52	01/11/43	2/5/1949	36195	967	258	Town of Rifle
PUMPING PL UNION OIL CAL	P	COLORADO RIVER	39	SE	SW	SE	6	7	S	95	W	S	IC*	9.9	108.6	09/05/52	01/11/43	2/14/1949	36204	728	259	Salvay
DRAGERT PUMP PLANT & PL	P	COLORADO RIVER	39	SE	SW	SE	6	7	S	95	W	S	CN*		94	11/10/66	09/05/52	1/7/1950	37503.36531	710	303	Chevron Shale Oil CP
DRAGERT PUMP PLANT & PL	P	COLORADO RIVER	39	SE	SW	SE	6	7	S	95	W	S	CN*		100	11/10/66	09/05/52	4/12/1951	37503.36991	710	308	Chevron Shale Oil CP
FLATTOPS PROJ BENCH FLUM	D	CANYON CREEK	39	NW	SW	SW	20	4	S	89	W	S	IM*		254	11/10/66	09/05/52	6/28/1954	38164	925	314A	ExxonMobil
FLATTOPS PROJ POSS COLL1	D	CANYON CREEK	39	NW	SE	SW	19	5	S	89	W	S	IM*		175	11/10/66	09/05/52	6/28/1954	38164	926	314B	ExxonMobil
FLATTOPS PROJ BEARWL CON	L	CANYON CREEK	39	NE	SW	NW	24	5	S	90	W	S	IM*		200	11/10/66	09/05/52	6/28/1954	38164	927	314C	ExxonMobil
DOW E MIDDLE FORK PL	L	PARACHUTE CREEK	39	NE	NE	NE	15	5	S	95	W	S	CN*	6.46	13.54	11/10/66	09/05/52	10/19/1954	38277	707	317	EXXON MOBIL CORP
DOW MIDDLE FK PIPELINE	L	PARACHUTE CREEK	39	NW	NE	NE	6	5	S	95	W	S	CN*	8.912	1.088	11/10/66	09/05/52	10/20/1954	38278	708	318	EXXON MOBIL CORP
DOW PUMP PLANT AND PL	P	COLORADO RIVER	39	SE	NE	SE	6	7	S	95	W	S	CN*	30.89	147.11	11/10/66	09/05/52	1/24/1955	38374	709	319	EXXON MOBIL CORP - ConocoPhillips
GRAND VALLEY PIPELINE	L	COLORADO RIVER	39	NW	NW	NE	7	7	S	95	W	S	MFD	0.78	29.22	11/10/66	09/05/52	6/18/1956	38885	719	321	Town of Parachute
SINCLAIR OIL & GAS PUMP	P	COLORADO RIVER	39	NW	NE	NE	23	7	S	96	W	S	CN*		33	11/10/66	09/05/52	11/29/1956	39049	731	324	Pucket Land Company
OIL SHALE CORP P & PL	P	COLORADO RIVER	39	NW	NW	NW	4	7	S	95	W	S	CN*		100	11/10/66	09/05/52	12/3/1956	39053	954	325	Tosco
EATON PIPELINE NO 1	L	COLORADO RIVER	39		SW	SW	13	7	S	96	W	S	IND		10	07/09/65	03/02/53	12/17/1956	39067	755	255	Pucket Land Company
BLUESTONE PROJECT	D	COLORADO RIVER	39		SW	NW	16	6	S	93	W	S	IM*		220	11/10/66	09/05/52	3/27/1958	39532	704	326	Colorado River Water Cons Dist
ROCK-N-PINES NO 1 DITCH	D	CANYON CREEK	39	SW	SW	NW	12	5	S	90	W	S	I	3	4	11/10/66	09/05/52	11/11/1958	39761	827	328	Eric Williams
SHALE PUMPS AND PIPELINE	P	COLORADO RIVER	39	SW	SE	NE	27	7	S	96	W	S	IN*		11.11	11/10/66	09/05/52	10/7/1959	40091	730	338	Frac Tech Services
DOW PUMP PLANT AND PL	P	COLORADO RIVER	39	SE	NE	SE	6	7	S	95	W	S	IM*		40	11/10/66	09/05/52	6/19/1963	41442	709	342	EXXON MOBIL CORP
MAIN ELK WHEELER G PL	L	MAIN ELK CREEK	39	SE	SE	SE	15	5	S	91	W	S	IM*		40	11/10/66	09/05/52	6/19/1963	41442	721	342	Main Elk Corp & Exxon Mobil
ROAN PLATEAU PUMP PL	P	COLORADO RIVER	39		NW	SW	5	7	S	95	W	S	IM*		100	11/10/66	09/05/52	5/27/1964	41785	729	CA4914	Unknown
DEN WELL	W	COLORADO RIVER	39	NE	SE	NE	34	5	S	90	W	S	CD	0.044	0.286	12/31/72		4/30/1966	42488	5078	W1217	K E WILLIAMS ETAL
KAY'S WELL	W	CANYON CREEK	39	NE	SW	SW	14	5	S	90	W	S	D	0.022	0.066	12/31/72		11/5/1969	43773	5156	W1217	KATHRYN WILLIAMSETAL
VAN HORN DITCH	D	PARACHUTE CREEK	39	NW	SE	SW	11	7	S	96	W	S	I	4.2	3.8	12/31/1970	12/31/1969	3/1/1935	43829.31105	681	W0099	SIDNEY R LINDAUER
RUNYAN SPRING NO 1	S	SPRINGS AND SEEPAGE	39	NW	NW	NW	17	6	S	93	W	S	D		0.018	12/31/1971	12/31/1970	9/23/1971	44460	5248	W0450	John & V Runyan
RUNYAN SPRING NO 2	S	SPRINGS AND SEEPAGE	39	NE	NW	NW	17	6	S	93	W	S	D		0.003	12/31/1971	12/31/1970	9/23/1971	44460	5249	W0450	John & V Runyan
PROPER WEATHERLY SP NO 1	S	EAST ELK CREEK	39		SW	SE	6	5	S	90	W	S	ID	0.09	0.11	12/31/1972	12/31/1971	10/15/1971	44559.44482	887	W1109	Unknown
CLARK SPRING	S	COLORADO RIVER	39	SE	SE	NE	36	5	S	92	W	S	I		0.007	12/31/1973	12/31/1972	9/1/1973	45169	907	W2136	DOUGLAS + M CLARK
TONY PERRY DITCH	D	WEST ELK CREEK	39			SW	29	4	S	91	W	S	DS		0.2	12/31/1974	12/31/1973	8/1/1973	45290.45138	673	W2263	JOHN SALVUCCI
WEST GLENWOOD SAN D W 1	W	COLORADO RIVER	39	NW	SE	NW	6	6	S	89	W	S	N		0.033	12/31/1974	12/31/1973	5/1/1974	45411	5317	W2338	City of Glenwood Springs
THOMPSON SPRING AND PUMP	SP	COLORADO RIVER	39		SE	SE	10	6	S	93	W	S	IDS	0.25	0.25	12/31/1974	12/31/1973	8/24/1974	45526	5292	W2449	RUTH THOMPSON ETAL
STORM KING RN MIT CR DIV	D	MITCHELL CREEK	39	NW	SW	NW	34	5	S	89	W	S	IM*		2.3	12/31/1974	12/31/1973	9/25/1974	45558	984	86CW0012	STORM KING RANCH INC
SNYDER SPRING	S	EAST ELK CREEK	39		NW	SE	13	5	S	91	W	S	D		0.011	12/31/1974	12/31/1973	10/25/1974	45588	5270	W2464	JAMES GUY SNYDER
WALTERS SPRING OVERFLOW	S	EAST ELK CREEK	39	SE	NW	SE	13	5	S	91	W	S	I		0.198	12/31/1975	12/31/1974	5/5/1975	45780	5313	W2688	FRED + C SNYDER
WEBSTER HILL RES P INLET	Z	COLORADO RIVER	39	NW	SE	NW	28	6	S	94	W	S	p		3500	12/31/1976	12/31/1975	7/2/1970	46020.44012	991	W3207	(abandoned)
CEMETERY SPRING	S	RIFLE CREEK	39		NW	SE	9	6	S	93	W	S	IS	0.1	0.5	12/31/1977	12/31/1976	6/30/1976	46386.46202	906	W3514	TROY + NELDA MORGAN
KATT DIVR POINT NO 1	D	EAST RIFLE CREEK	39	NE	NE	SW	2	5	S	92	W	S	IDS		0.1	12/31/1978	12/31/1977	9/4/1975	46751.45902	946	W3858	Howard & Diana Vagneur
KATT DIVR POINT NO 2	D	EAST RIFLE CREEK	39	NW	SE	SW	2	5	S	92	W	S	IDS		0.1	12/31/1978	12/31/1977	9/4/1975	46751.45902	1009	W3858	Howard & Diana Vagneur

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
KATT SPRING NO 1	S	EAST RIFLE CREEK	39	NE	NE	SW	2	5	S	92	W	S	IDS		0.1	12/31/1978	12/31/1977	9/4/1975	46751.45902	1010	W3858	Howard & Diana Vagneur
KATT SPRING NO 2	S	EAST RIFLE CREEK	39	NE	NE	SW	2	5	S	92	W	S	IDS		0.1	12/31/1978	12/31/1977	9/4/1975	46751.45902	1011	W3858	Howard & Diana Vagneur
KATT SPRING NO 3	S	EAST RIFLE CREEK	39	NW	NE	SW	2	5	S	92	W	S	IDS		0.1	12/31/1978	12/31/1977	9/4/1975	46751.45902	1012	W3858	Howard & Diana Vagneur
KATT SPRING NO 4	S	EAST RIFLE CREEK	39	SW	NE	SW	2	5	S	92	W	S	IDS		0.1	12/31/1978	12/31/1977	9/4/1975	46751.45902	1013	W3858	Howard & Diana Vagneur
KATT SPRING NO 5	S	EAST RIFLE CREEK	39	SW	NE	SW	2	5	S	92	W	S	IDS		0.1	12/31/1978	12/31/1977	9/4/1975	46751.45902	1014	W3858	Howard & Diana Vagneur
SALT SPRING	S	COLORADO RIVER	39	NE	SE	SW	23	5	S	92	W	S	SW		0.002	12/31/1978	12/31/1977	6/1/1977	46751.46538	5361	W3982	BLM
PIERRE WELL NO 1	W	COLORADO RIVER	39		SE	SE	10	6	S	93	W	S	FD	0.066	0.189	12/31/1978	12/31/1977	12/19/1977	46751.46739	5201	W3821	Pierre Barthelemy
EMMER WELL NO 2	W	RIFLE CREEK	39	SW	NE	NW	30	5	S	92	W	S	IM*		0.33	12/31/1978	12/31/1977	4/20/1978	46861	5097	W3877	Rifle Creek Estates
KILBURN WASTE WATER PUMP	P	EAST RIFLE CREEK	39	SW	SW	SE	2	5	S	92	W	S	ID		0.2	12/31/1978	12/31/1977	8/4/1978	46967	880	W3847	JAMES KILBURN
SILT PIPELINE	L	COLORADO RIVER	39	SW	SE	NE	10	6	S	92	W	S	MC*	0.352	0.033	12/31/1979	12/31/1978	7/5/1977	47116.46572	868	93CW0152	Town of Silt
CACTUS VALLEY WELL NO 1	W	COLORADO RIVER	39	SE	NW	SW	1	6	S	93	W	S	IM*		0.06	12/31/1979	12/31/1978	6/1/1978	47116.46903	5588	79CW0371	Ken M Good Irr Trust
CORLETT SPRING	S	GOVERNMENT CREEK	39	SE	SW	SW	4	5	S	93	W	S	IDS	0.003	0.018	12/31/1980	12/31/1979	4/30/1980	47602	5345	80CW0502	LOWELL E CORLETT
INGELHART WELL NO 1	W	COLORADO RIVER	39	SW	NW	NW	6	6	S	89	W	S	C		0.55	12/31/1980	12/31/1979	5/12/1980	47614	5024	80CW0245	F R & J A Ingelhart
BETTWOOD SPRING NO 1	S	COLORADO RIVER	39	SE	NE	NE	18	6	S	93	W	S	ND		0.011	12/31/1980	12/31/1979	9/30/1980	47755	842	80CW0380	Darrly Grosjean
BETTWOOD SPRING NO 2	S	COLORADO RIVER	39	NE	SE	NE	18	6	S	93	W	S	ND		0.011	12/31/1980	12/31/1979	9/30/1980	47755	843	80CW0380	Darrly Grosjean
EDWARD MCCUNE WELL	W	EAST ELK CREEK	39	NE	SW	SE	13	5	S	91	W	S	H		0.033	12/31/84		7/6/1981	48034	5402	84CW0395	PETE NUETZE
HAROLD MCCUNE WELL	W	EAST ELK CREEK	39	SW	NW	SE	13	5	S	91	W	S	H		0.033	12/31/84		7/6/1981	48034	5403	84CW0395	PETE NUETZE
NINA MCCUNE WELL	W	EAST ELK CREEK	39	NW	NW	SE	13	5	S	91	W	S	H		0.033	12/31/84		7/6/1981	48034	5404	84CW0395	PETE NUETZE
K WELL NO 2	W	COLORADO RIVER	39	NE	NW	SW	11	6	S	93	W	S	IM*	0.189	0.031	12/31/1981	12/31/1980	8/11/1981	48070	5366	81CW0274	Cottonwood Spring Trailer Park
K WELL NO 3	W	COLORADO RIVER	39	SE	NW	SW	11	6	S	93	W	S	IM*	0.169	0.051	12/31/1981	12/31/1980	8/11/1981	48070	5367	81CW0274	Cottonwood Spring Trailer Park
PITTS SPRINGS	S	COLORADO RIVER	39	NE	SW	SE	4	6	S	92	W	S	IM*		0.011	12/31/1981	12/31/1980	9/22/1981	48112	5213	81CW0506	CARL V PITTS
RIFLE TOWN OF PUMP & PL	P	COLORADO RIVER	39	NE	SW	NE	15	6	S	93	W	S	IM*		23.1	12/31/1981	12/31/1980	12/16/1981	48197	967	81CW0437	Town of Rifle
RIPPY WELL NO 1	W	COLORADO RIVER	39	SE	NE	SE	5	6	S	91	W	S	IM*		0.067	12/31/1982	12/31/1981	1/1/1970	48212.4383	5432	82CW0145	Adair Rippy
RIPPY WELL NO 2	W	COLORADO RIVER	39	SE	NE	SE	5	6	S	91	W	S	IM*		0.067	12/31/1982	12/31/1981	1/1/1970	48212.4383	5433	82CW0145	Adair Rippy
RIPPY WELL NO 3	W	COLORADO RIVER	39	NE	NE	SE	5	6	S	91	W	S	IM*	0.057	0.01	12/31/1982	12/31/1981	1/1/1970	48212.4383	5434	01CW0050	Adair Rippy
ELK VALLEY ESTATES W1-27	W	EAST ELK CREEK	39	NW	SW	SW	7	5	S	90	W	S	IF*		2.268	12/31/1982	12/31/1981	9/30/1979	48212.47389	6040	00CW0006	DR HARVEY BENDER
UNION 76 WATER WELL NO 3	W	PARACHUTE CREEK	39	NW	NE	SE	36	5	S	96	W	S	IM*	1.048	0.066	12/31/1982	12/31/1981	12/4/1980	48212.4782	5414	82CW0380	Union Oil - American Soda
UNION 76 WATER WELL NO 2	W	PARACHUTE CREEK	39	NE	SE	NE	36	5	S	96	W	S	IM*	0.99	0.124	12/31/1982	12/31/1981	12/4/1980	48212.4782	5415	82CW0380	Union Oil - American Soda
CANYON CREEK WELL NO 1	W	CANYON CREEK	39	SE	NW	NW	36	5	S	90	W	S	IC*	0.118	0.104	12/31/1982	12/31/1981	1/31/1981	48212.47878	5033	82CW0172	Canyon Creek Estates Home Assoc
MAHAFFEY PUMPING P & PL	P	COLORADO RIVER	39	SW	SW	SE	33	6	S	95	W	S	IM*		60	12/31/1982	12/31/1981	6/9/1981	48212.48007	878	82CW0349	Main Elk Corp & Exxon Mobil
NEW CASTLE WTR WK SYS PL	L	EAST ELK CREEK	39	NW	SW	NE	24	5	S	91	W	S	IM*		10	12/31/1982	12/31/1981	12/23/1981	48212.48204	851	81CW0477	Town of New Castle
RIPPY RESERVOIR ALT NO 1	R	COLORADO RIVER	39	NE	SW	SE	5	6	S	91	W	S	IM*		2	12/31/1982	12/31/1981	5/10/1982	48342	3708	82CW0145	Adair Rippy
ROBINSON WELL NO 1	W	RIFLE CREEK	39	NW	NW	NE	30	5	S	92	W	S	IM*	0.018	0.362	12/31/1982	12/31/1981	5/15/1982	48347	5328	82CW0152	Ann Robinson & R & C Keuster
REDSTONE WELL 21-9	W	COLORADO RIVER	39	NE	NW	NW	9	6	S	89	W	S	CN*		5.56	12/31/1983	12/31/1982	6/18/1981	48577.48016	5020	83CW0150	Pitkin Iron Corp
GETTY SPRING 1B	S	PARACHUTE CREEK	39	NW	SW	SW	14	5	S	97	W	S	IM*	0.033	0.097	12/31/1983	12/31/1982	7/1/1983	48759	5458	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 1C	S	PARACHUTE CREEK	39	NE	SW	SW	14	5	S	97	W	S	IM*	0.033	0.007	12/31/1983	12/31/1982	7/1/1983	48759	5459	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 2C	S	PARACHUTE CREEK	39	NW	NE	SE	10	5	S	97	W	S	IM*	0.033	0.497	12/31/1983	12/31/1982	7/1/1983	48759	5465	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 4A	S	PARACHUTE CREEK	39	NE	NE	SE	2	5	S	97	W	S	IM*	0.033	0.237	12/31/1983	12/31/1982	7/1/1983	48759	5469	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 6C	S	PARACHUTE CREEK	39	SE	NW	SW	13	5	S	97	W	S	IM*	0.033	0.007	12/31/1983	12/31/1982	7/1/1983	48759	5472	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 6H	S	PARACHUTE CREEK	39	NW	SW	NE	23	5	S	97	W	S	IM*	0.033	0.167	12/31/1983	12/31/1982	7/1/1983	48759	5477	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 6I	S	PARACHUTE CREEK	39	NE	NE	SW	23	5	S	97	W	S	IM*	0.033	0.007	12/31/1983	12/31/1982	7/1/1983	48759	5478	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 7A	S	PARACHUTE CREEK	39	NW	SW	NW	25	5	S	97	W	S	IM*	0.033	0.027	12/31/1983	12/31/1982	7/1/1983	48759	5479	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 7E	S	PARACHUTE CREEK	39	SW	SW	SE	24	5	S	97	W	S	IM*	0.033	0.007	12/31/1983	12/31/1982	7/1/1983	48759	5483	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 8A	S	PARACHUTE CREEK	39	SE	SE	SW	25	5	S	97	W	S	IM*	0.033	0.027	12/31/1983	12/31/1982	7/1/1983	48759	5485	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 8E	S	PARACHUTE CREEK	39	NE	NW	SW	36	5	S	97	W	S	IM*	0.033	0.027	12/31/1983	12/31/1982	7/1/1983	48759	5489	83CW0365	CHEVRON TEXACO SHALE OIL CO
OASIS CREEK LOWER SPRING	L	OASIS CREEK	39	SE	SE	SE	35	5	S	89	W	S	IM*		0.2	12/31/1983	12/31/1982	12/30/1983	48941	1024	83CW0385	TOM ZANCANELLA
DOMESTIC SPRING NO 4	S	EAST RIFLE CREEK	39	SE	SW	SE	15	4	S	92	W	S	FD	0.033	0.217	12/31/1984	12/31/1983	11/30/1967	48942.43067	5399	84CW0721	Co DOW
CITIES SERVICE SPG 19	S	PARACHUTE CREEK	39	NW	NE	NW	4	6	S	97	W	S	IM*		0.02	12/31/1984	12/31/1983	7/19/1983	48942.48777	5435	84CW0036	Cities Service Oil & G
CITIES SERVICE SPG 23	S	PARACHUTE CREEK	39	NE	SE	NE	4	6	S	97	W	S	IM*		0.02	12/31/1984	12/31/1983	7/19/1983	48942.48777	5436	84CW0036	Cities Service Oil & G

District 39
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
CITIES SERVICE SPG 24	S	PARACHUTE CREEK	39	NW	NE	NW	3	6	S	97	W	S	IM*		0.07	12/31/1984	12/31/1983	7/19/1983	48942.48777	5437	84CW0036	Cities Service Oil & G
CITIES SERVICE SPG 25	S	PARACHUTE CREEK	39	NW	SE	NE	3	6	S	97	W	S	IM*		0.06	12/31/1984	12/31/1983	7/19/1983	48942.48777	5438	84CW0036	Cities Service Oil & G
CITIES SERVICE SPG 30	S	PARACHUTE CREEK	39	NE	NE	SE	10	6	S	97	W	S	IM*		0.05	12/31/1984	12/31/1983	7/19/1983	48942.48777	5439	84CW0036	Cities Service Oil & G
RED ROCKS SPRING NO 3	P	COLORADO RIVER	39	NW	SW	NW	33	5	S	90	W	S	IS		1	12/31/1986	12/31/1985	6/1/1984	49673.49095	1037	86CW0367	Fass Ranch LLLP
RED ROCKS SPRING NO 4	S	COLORADO RIVER	39	SE	SW	NE	32	5	S	90	W	S	IS		1	12/31/1986	12/31/1985	6/1/1984	49673.49095	1038	86CW0368	Faye Faas
GLENWOOD SPRINGS PL NO 1	L	MITCHELL CREEK	39	NE	NW	NW	34	5	S	89	W	S	P	2.3	0.5	12/31/1986	12/31/1985	7/17/1985	49673.49506	570	86CW0070	Co DOW
NOSR WATER SYSTEM PL	L	COLORADO RIVER	39	NE	NE	NE	29	6	S	94	W	S	MN		100	12/31/1987	12/31/1986	1/31/1983	50038.48608	1065	W0467	US Dept of Natural Gas
NEW CASTLE AUGMT STATION	P	COLORADO RIVER	39	SW	NE	SW	31	5	S	90	W	S	IM*		5	12/31/1987	12/31/1986	5/22/1984	50038.49085	1049	87CW0373	Town of New Castle
WEST GLENWOOD SPRING NO1	S	MITCHELL CREEK	39	NE	NE	SW	6	6	S	89	W	S	IM*		1	12/31/1987	12/31/1986	9/9/1987	50290	1039	87CW0210	DOW
DAVENPORT DITCH	D	PARACHUTE CREEK	39	NW	SW	NW	30	5	S	95	W	S	r	4.8	5.2	12/31/1987	12/31/1986	9/21/1987	50302	546	87CW0302	Salvey/ EnCana
WEST GLENWOOD SPRING NO2	S	MITCHELL CREEK	39	NW	NE	SW	6	6	S	89	W	S	IM*		1	12/31/1987	12/31/1986	10/30/1987	50341	1048	87CW0245	DOW
ESTES GULCH PUMP	P	GOVERNMENT CREEK	39			SE	14	5	S	93	W	S	N		0.004	12/31/1988	12/31/1987	9/27/1988	50674	1052	88CW0347	MK-FERGUSON COMP
WEST FORK DITCH	D	PARACHUTE CREEK	39	NW	NW	SE	25	5	S	96	W	S	r	1.9	8.1	12/31/1989	12/31/1988	6/21/1989	50941	691	87CW0302	Salvey
NORTH CANYON SPRING & PL	S	EAST CANYON CREEK	39	SE	SW	SE	13	5	S	89	HW	S	IDS	0.203	0.033	12/31/1990	12/31/1989	5/5/1988	51134.50529	1054	90CW0120	OKANELA LAND &CATTLE
BENDER POND FEEDER DITCH	D	EAST ELK CREEK	39	SW	NW	SE	6	5	S	90	W	S	O		2	12/31/1990	12/31/1989	12/3/1990	51471	1058	90CW0332	DR HARVEY BENDER
SCHOPP SPRING NO 1	S	COLORADO RIVER	39	NE	SW	SW	4	6	S	92	W	S	IDS		0.03	12/31/1991	12/31/1990	11/28/1990	51499.51466	5589	91CW0097	Billie Blackwell
SCHOPP SPRING NO 3	S	COLORADO RIVER	39	SE	SW	SW	4	6	S	92	W	S	IDS		0.2	12/31/1991	12/31/1990	11/28/1990	51499.51466	5590	91CW0097	Billie Blackwell
SCHOPP SPRING NO 4	S	COLORADO RIVER	39	SW	SW	SW	4	6	S	92	W	S	IDS		0.03	12/31/1991	12/31/1990	11/28/1990	51499.51466	5591	91CW0097	Billie Blackwell
SCHOPP SPRING NO 5	S	COLORADO RIVER	39	SW	SW	SW	4	6	S	92	W	S	IDS		0.03	12/31/1991	12/31/1990	11/28/1990	51499.51466	5592	91CW0097	Billie Blackwell
SCHOPP SPRING NO 6	S	COLORADO RIVER	39	SW	SW	SW	4	6	S	92	W	S	IDS		0.03	12/31/1991	12/31/1990	11/28/1990	51499.51466	5593	91CW0097	Billie Blackwell
SCHOPP SPRING NO 7	S	COLORADO RIVER	39	SW	SW	SW	4	6	S	92	W	S	IDS		0.03	12/31/1991	12/31/1990	11/28/1990	51499.51466	5594	91CW0097	Billie Blackwell
SCHOPP SPRING NO 8	S	COLORADO RIVER	39	SW	SW	SW	4	6	S	92	W	S	IDS		0.03	12/31/1991	12/31/1990	11/28/1990	51499.51466	5595	91CW0097	Billie Blackwell
SCHOPP SPRING NO 9	S	COLORADO RIVER	39	SW	SW	SW	4	6	S	92	W	S	IDS		0.03	12/31/1991	12/31/1990	11/28/1990	51499.51466	5596	91CW0097	Billie Blackwell
SCHOPP SPRING NO 10	S	COLORADO RIVER	39	SW	SW	SW	4	6	S	92	W	S	IDS		0.03	12/31/1991	12/31/1990	11/28/1990	51499.51466	5597	91CW0097	Billie Blackwell
SCHOPP SPRING NO 11	S	COLORADO RIVER	39	SW	SW	SW	4	6	S	92	W	S	IDS		0.03	12/31/1991	12/31/1990	11/28/1990	51499.51466	5598	91CW0097	Billie Blackwell
SCHOPP SPRING NO 12	S	COLORADO RIVER	39	SW	SW	SW	4	6	S	92	W	S	IDS		0.03	12/31/1991	12/31/1990	11/28/1990	51499.51466	5599	91CW0097	Billie Blackwell
SCHOPP SPRING NO 13	S	COLORADO RIVER	39	SW	SW	SW	4	6	S	92	W	S	IDS		0.03	12/31/1991	12/31/1990	11/28/1990	51499.51466	5600	91CW0097	Billie Blackwell
BIG BUCKS WASTE &S DITCH	D	GOVERNMENT CREEK	39	SE	SE	SE	36	5	S	93	W	S	IR*		0.25	12/31/1992	12/31/1991	10/31/1991	51864.51803	1067	92CW0029	H&S INVESTMENTS
SILT PUMP CANAL	DLP	COLORADO RIVER	39	SW	SE	NW	12	6	S	92	W	S	IM*		10	12/31/1992	12/31/1991	2/13/1992	51908	663	92CW0014	Silt Water Conservancy District
RIFLE FALLS REC SPG NO.1	S	EAST RIFLE CREEK	39	SE	NW	NE	27	4	S	92	W	S	IP	0.34	0.56	12/31/1993	12/31/1992	12/31/1974	52230.45655	965	93CW0238	COLO DIV OF WILDLIFE
DANCIGER PUMP DIVERSION	P	COLORADO RIVER	39	SW	SE	NW	2	6	S	93	W	S	ID*	1	1	12/31/1993	12/31/1992	9/2/1993	52475	832	93CW0296	DAVID K DANCIGER
REGULSKI WELL 1	W	COLORADO RIVER	39	SE	SE	NE	11	6	S	93	W	S	IC		0.044	12/31/1994	12/31/1993	11/4/1993	52595.52538	5240	94CW0003	William and Donna M Dubios
TAMBURELLO SPRING	S	COLORADO RIVER	39	NE	NW	SE	2	6	S	93	W	S	DS		0.033	12/31/1994	12/31/1993	3/31/1994	52685	5649	94CW0145	GREG AND ANNE TAMBURELLO
PUMA PAW SPRING	S	MIDDLE RIFLE CREEK	39	SE	NE	NE	24	4	S	93	W	S	CD		0.3	12/31/1995	12/31/1994	5/14/1994	52960.52729	5046	95CW0336	PUMA PAW RANCH
ALCORN DITCH DIVERSION 1	D	COLORADO RIVER	39		NE	NE	5	6	S	92	W	S	IS		0.5	12/31/1995	12/31/1994	3/8/1995	53027	818	95CW0044	Dale Alcorn
PHYLLIS PUMP	P	COLORADO RIVER	39		NE	SW	5	6	S	92	W	S	IP*		0.25	12/31/1995	12/31/1994	6/23/1995	53134	758	95CW0271	PHYLLIS WALKER
WRIGHT DIVERSION POINT	P	CANYON CREEK	39	SE	SW	SW	25	5	S	90	W	S	IP*	0.044	0.206	12/31/1995	12/31/1994	7/5/1995	53146	735	95CW0140	FRANK WRIGHT
LODGE LAKE OUTFALL	S	CANYON CREEK	39		SE	SE	13	5	S	90	W	S	IS		0.1	12/31/1995	12/31/1994	7/15/1995	53156	759	95CW0150	WILLIAM AND JILL BULLOCK
PONDEROSA SPRING NO 1	S	GOVERNMENT CREEK	39		SW	SW	5	5	S	93	W	S	IF*		0.167	12/31/1996	12/31/1995	10/22/1976	53325.46316	756	96CW0166	Ken Rose (BLM Co-Owner)
FARMER WELL NO 2	W	GOVERNMENT CREEK	39	SW	NE	SE	36	5	S	93	W	S	D		0.022	12/31/1995	12/31/1994	1/18/1996	53343	5422	95CW0076	Sheldon & L Roush
BETZ DOMESTIC WELL	W	COLORADO RIVER	39	NE	NW	NW	6	6	S	89	W	S	D		0.033	12/31/1996	12/31/1995	2/15/1996	53371	5421	96CW0173	Sonlight 4Square Gospel Church
CLINETOP DITCH	D	MAIN ELK CREEK	39	SW	NW	NE	26	4	S	91	W	S	CP*		0.5	12/31/1996	12/31/1995	7/26/1996	53533	531	96CW0277	DARREL & LILLIAN REED ESTATE
REED SPRING	S	MAIN ELK CREEK	39		NW	NW	1	5	S	91	W	S	CP*		0.009	12/31/1996	12/31/1995	7/26/1996	53533	5344	96CW0277	DARREL & LILLIAN REED ESTATE
GOLDSMITH DITCH	D	COLORADO RIVER	39	NE	NW	NE	5	8	S	96	W	S	IC*		5	12/31/1996	12/31/1995	11/15/1996	53645	784	96CW0384	CENTENNIAL MARKETING
GOLDSMITH RES PUMP STATN	P	COLORADO RIVER	39	SW	SE	NW	7	8	S	96	W	S	IC*		5	12/31/1996	12/31/1995	11/15/1996	53645	787	96CW0384	CENTENNIAL MARKETING
GOLDSMITH WELL NO 1	W	COLORADO RIVER	39	NE	NW	SW	33	7	S	96	W	S	IC*		0.5	12/31/1996	12/31/1995	11/15/1996	53645	5683	96CW0384	CENTENNIAL MARKETING
GOLDSMITH WELL NO 2	W	COLORADO RIVER	39	SE	NW	SW	33	7	S	96	W	S	IC*		0.5	12/31/1996	12/31/1995	11/15/1996	53645	5684	96CW0384	CENTENNIAL MARKETING
GOLDSMITH WELL NO 3	W	COLORADO RIVER	39	NW	SW	SW	33	7	S	96	W	S	IC*		0.5	12/31/1996	12/31/1995	11/15/1996	53645	5685	96CW0384	CENTENNIAL MARKETING
GOLDSMITH WELL NO 4	W	COLORADO RIVER	39	NW	SW	SW	5	8	S	96	W	S	IC*		0.5	12/31/1996	12/31/1995	11/15/1996	53645	5686	96CW0384	CENTENNIAL MARKETING

District 39
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
GOLDSMITH WELL NO 5	W	COLORADO RIVER	39	NW	NW	SW	5	8	S	96	W	S	IC*		0.5	12/31/1996	12/31/1995	11/15/1996	53645	5687	96CW0384	CENTENNIAL MARKETING
GOLDSMITH WELL NO 6	W	COLORADO RIVER	39	NE	NE	SE	6	8	S	96	W	S	IC*		0.5	12/31/1996	12/31/1995	11/15/1996	53645	5688	96CW0384	CENTENNIAL MARKETING
GOLDSMITH WELL NO 7	W	COLORADO RIVER	39	SE	SE	SE	6	8	S	96	W	S	IC*		0.5	12/31/1996	12/31/1995	11/15/1996	53645	5689	96CW0384	CENTENNIAL MARKETING
GOLDSMITH WELL NO 8	W	COLORADO RIVER	39	NW	NE	NE	7	8	S	96	W	S	IC*		0.5	12/31/1996	12/31/1995	11/15/1996	53645	5690	96CW0384	CENTENNIAL MARKETING
GOLDSMITH WELL NO 9	W	COLORADO RIVER	39	SW	NE	NE	7	8	S	96	W	S	IC*		0.5	12/31/1996	12/31/1995	11/15/1996	53645	5691	96CW0384	CENTENNIAL MARKETING
NARROWS SPRING NO 1	S	EAST RIFLE CREEK	39	NE	NE	NW	10	4	S	92	W	S	P		9	12/31/1996	12/31/1995	12/9/1996	53669	6090	96CW0354	DOW
HUBBELL WELL NO 1	W	MAIN ELK CREEK	39	SE	NE	NE	35	4	S	91	W	S	IDS		0.033	12/31/1997	12/31/1996	5/4/1994	53691.52719	6095	97CW0259	RALPH & CONNIE HUBBELL
RIFLE CORRECTIONAL C W 5	W	MIDDLE RIFLE CREEK	39	SE	SE	NW	36	4	S	93	W	S	IC*		0.167	12/31/1997	12/31/1996	6/5/1995	53691.53116	6054	97CW0059	Colorado Department of Corrections
RIFLE CORRECTIONAL C W 6	W	MIDDLE RIFLE CREEK	39	NE	NE	NW	1	5	S	93	W	S	IC*		0.167	12/31/1997	12/31/1996	6/5/1995	53691.53116	6055	97CW0059	Colorado Department of Corrections
RIFLE CORRECTIONAL C W 7	W	MIDDLE RIFLE CREEK	39	NE	NE	NW	1	5	S	93	W	S	IC*		0.167	12/31/1997	12/31/1996	6/5/1995	53691.53116	6056	97CW0059	Colorado Department of Corrections
RIFLE CORRECTIONAL C W 8	W	MIDDLE RIFLE CREEK	39	SE	SE	SW	36	4	S	93	W	S	IC*		0.167	12/31/1997	12/31/1996	6/5/1995	53691.53116	6057	97CW0059	Colorado Department of Corrections
RIFLE CORRECTIONAL C W 9	W	MIDDLE RIFLE CREEK	39	NW	SW	NE	1	5	S	93	W	S	IC*		0.167	12/31/1997	12/31/1996	6/5/1995	53691.53116	6058	97CW0059	Colorado Department of Corrections
RIFLE CORECTIONAL C W 10	W	MIDDLE RIFLE CREEK	39	NW	SW	NE	1	5	S	93	W	S	IC*		0.167	12/31/1997	12/31/1996	6/5/1995	53691.53116	6059	97CW0059	Colorado Department of Corrections
HAZELTON SPRING NO 2	S	MAIN ELK CREEK	39	NW	NW	NW	31	5	S	90	W	S	IDS		0.022	12/31/1997	12/31/1996	3/10/1997	53760	846	97CW0072	Larey Hazelton
HAZELTON SPRING NO 3	S	MAIN ELK CREEK	39	NW	NW	NW	31	5	S	90	W	S	IDS		0.022	12/31/1997	12/31/1996	3/10/1997	53760	890	97CW0072	Larey Hazelton
GRIFFIN SPRING NO 3	S	COLORADO RIVER	39		SE	SE	33	5	S	92	W	S	IF*		0.044	12/31/1997	12/31/1996	3/25/1997	53775	5274	97CW0119	Charles and Vivian Griffin
BOWLES DIVERSION	D	COLORADO RIVER	39	NE	SW	NW	35	5	S	90	W	S	FD*		0.5	12/31/1997	12/31/1996	7/8/1997	53880	775	97CW0162	DOROTHY BOWLES
OPPORTUNITY SPRING NO.3	S	RIFLE CREEK	39	NE	NE	NE	3	5	S	92	W	S	IS		0.04	12/31/1997	12/31/1996	7/31/1997	53903	6050	97CW0174	JAMES & LINDA STONEMAN
HUBBELL DITCH AND PL	D	MAIN ELK CREEK	39	SE	NE	NE	35	4	S	91	W	S	IP*		0.25	12/31/1997	12/31/1996	10/3/1997	53967	779	97CW0259	RALPH & CONNIE HUBBELL
HUBBELL WELL NO 2	W	MAIN ELK CREEK	39	SE	NE	NE	35	4	S	91	W	S	IDS		0.033	12/31/1997	12/31/1996	10/3/1997	53967	6096	97CW0259	RALPH & CONNIE HUBBELL
KING'S CROWN DITCH & PL	D	RIFLE CREEK	39	SE	SW	SW	4	6	S	93	W	S	I	0.2	1	12/31/1998	12/31/1997	11/30/1998	54390	772	98CW0231	PATRICK JACKSON
HOLGATE DITCH NO. 2	D	COLORADO RIVER	39	NE	SE	NW	6	6	S	92	W	S	IS		1	12/31/1999	12/31/1998	12/1/1998	54421.54391	792	99CW0019	Ken Holgate
LAFRENZ SPRING	S	HARVEY GAP	39	SE	SE	NW	25	5	S	92	W	S	IR*		0.056	12/31/1999	12/31/1998	11/1/1999	54726	6052	99CW0301	THOMAS LAFRENZ
SIMON WELL	W	HARVEY GAP	39	NE	NE	NE	36	5	S	92	W	S	IF*		0.11	12/31/2000	12/31/1999	2/9/2000	54826	5266	00CW0036	PVO/SSE HOA
SILLS PUMP	P	RIFLE CREEK	39	SW	SE	NW	3	6	S	93	W	S	I		0.037	12/31/2000	12/31/1999	9/22/2000	55052	921	00CW0253	MARK SILLS
CREEKSIDE RANCH PUMP & PL	P	MAIN ELK CREEK	39	SW	NW	NW	25	5	S	91	W	S	CF*		0.25	12/31/2000	12/31/1999	10/17/2000	55077	611	00CW0276	JOEL T LEONARD REVOCABLE TRUST
OAK GROVE DITCH	D	EAST ELK CREEK	39	NE	NE	SW	24	5	S	91	W	S	CF*		0.25	12/31/2000	12/31/1999	10/17/2000	55077	633	00CW0276	EXXON MOBIL CORP
CREEKSIDE RANCH WELL NO1	W	MAIN ELK CREEK	39	SW	NW	NW	25	5	S	91	W	S	CDS		0.033	12/31/2000	12/31/1999	10/17/2000	55077	6374	00CW0276	JOEL T LEONARD REVOCABLE TRUST
CREEKSIDE RANCH WELL NO2	W	MAIN ELK CREEK	39	SW	NW	NW	25	5	S	91	W	S	CDS		0.033	12/31/2000	12/31/1999	10/17/2000	55077	6375	00CW0276	JOEL T LEONARD REVOCABLE TRUST
STARK WELL	W	MAIN ELK CREEK	39	SE	NW	NW	25	5	S	91	W	S	CDS		0.033	12/31/2000	12/31/1999	10/17/2000	55077	6376	00CW0276	JOEL T LEONARD REVOCABLE TRUST
SLAPPEY PIPELINE	L	EAST ELK CREEK	39	NW	NE	NW	25	5	S	91	W	S	PF*		0.25	12/31/2001	12/31/2000	1/26/2000	55152.54812	969	01CW0262	JAMES & BRENDA SLAPPEY
SLAPPEY WELL NO 1	W	EAST ELK CREEK	39	SW	NE	NW	25	5	S	91	W	S	IH		0.033	12/31/2001	12/31/2000	1/26/2000	55152.54812	6368	01CW0262	JAMES & BRENDA SLAPPEY
SLAPPEY WELL NO 2	W	EAST ELK CREEK	39	NW	SE	NW	25	5	S	91	W	S	IH		0.033	12/31/2001	12/31/2000	1/26/2000	55152.54812	6369	01CW0262	JAMES & BRENDA SLAPPEY
SLAPPEY WELL NO 3	W	EAST ELK CREEK	39		EH	NW	25	5	S	91	W	S	IH		0.033	12/31/2001	12/31/2000	1/26/2000	55152.54812	6370	01CW0262	JAMES & BRENDA SLAPPEY
SLAPPEY WELL NO 4	W	EAST ELK CREEK	39		EH	NW	25	5	S	91	W	S	IH		0.033	12/31/2001	12/31/2000	1/26/2000	55152.54812	6371	01CW0262	JAMES & BRENDA SLAPPEY
SLAPPEY WELL NO 5	W	EAST ELK CREEK	39		EH	NW	25	5	S	91	W	S	IH		0.033	12/31/2001	12/31/2000	1/26/2000	55152.54812	6372	01CW0262	JAMES & BRENDA SLAPPEY
SLAPPEY WELL NO 6	W	EAST ELK CREEK	39		EH	NW	25	5	S	91	W	S	IH		0.033	12/31/2001	12/31/2000	1/26/2000	55152.54812	6373	01CW0262	JAMES & BRENDA SLAPPEY
ZOOLITTLE PUMP AND PIPELINE	P	CANYON CREEK	39	NE	SW	NW	25	5	S	90	W	S	I		0.1	12/31/2001	12/31/2000	10/6/2000	55152.55066	904	01CW0035	ELIZABETH ARMSTRONG
SILT PIPELINE	L	COLORADO RIVER	39	SW	SE	NE	10	6	S	92	W	S	M		8.5	12/31/2001	12/31/2000	9/20/2001	55415	868	01CW0321	Town of Silt
PFEIFER SEEP	E	COLORADO RIVER	39	SE	SE	NE	1	6	S	92	W	S	ISO		0.5	12/31/2001	12/31/2000	11/1/2001	55457	6288	01CW0325	MICHELE PFEIFER
LUTER FEEDER DITCH	D	WEST ELK CREEK	39	NE	SE	SE	32	4	S	91	W	S	A		1	12/31/2001	12/31/2000	11/8/2001	55464	966	01CW0356	JOSEPH LUTER
WARNER DITCH	D	EAST CANYON CREEK	39	SE	NE	NE	24	5	S	90	W	S	IR*		0.67	12/31/2002	12/31/2001	2/25/1999	55517.54477	690	02CW0252	ROSEMARIE GLOSS
WATERSTONE WELL NO. 1	W	CANYON CREEK	39	NW	SE	NW	24	5	S	90	W	S	IDS		0.111	12/31/2002	12/31/2001	2/25/1999	55517.54477	6097	02CW0252	Gene & Cynthia Trexler
WATERSTONE WELL NO. 2	W	CANYON CREEK	39	SW	SE	NW	24	5	S	90	W	S	IDS		0.111	12/31/2002	12/31/2001	2/25/1999	55517.54477	6098	02CW0252	Gene & Cynthia Trexler
GABOSSI WELL	W	COLORADO RIVER	39	NW	SE	NW	35	5	S	90	W	S	IC		0.056	12/31/2002	12/31/2001	2/28/2002	55576	6289	02CW0058	ROC GABOSSI
WAGNER WELL	W	COLORADO RIVER	39	SE	SE	NW	35	5	S	90	W	S	IC		0.056	12/31/2002	12/31/2001	2/28/2002	55576	6290	02CW0058	ROC GABOSSI
WEST RIFLE PIT	W	COLORADO RIVER	39	SW	NW	SE	17	6	S	93	W	S	RP		0.189	12/31/2003	12/31/2002	5/1/1981	55882.47968	3514	03CW0290	CENTRAL AGGREGATES
GILEAD GARDENS RIVER DIVERS	D	COLORADO RIVER	39	SE	SW	NW	7	6	S	91	W	S	IR*		1	12/31/2003	12/31/2002	9/17/2003	56142	970	03CW0200	Gilead Gardens River Div
BOILER CREEK DITCH & PUMP	D	COLORADO RIVER	39	SE	SE	NE	6	5	S	90	W	S	I	0.125	0.125	12/31/2005	12/31/2004	4/15/1974	56613.45395	976	05CW0057	GEORGE & MAJORIE CHANDLER

District 39
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township	Range	P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership

Notes:
Highlighted rows indicate conditional water right may be used for energy development water demand
Data Sources Include - Colorado Decisions Support System (CDSS) Database, Hydrobase Colorado Division of Water Resources (DWR), and personal discussion with water commissioner

District 39
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township	Range	P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
FLATTOPS PROJ BEARWL RES	R	CANYON CREEK	39	NE	SW	NE	23	5 S	90 W	S	IM*		49292	24421	19242	6/28/1954	38164	3932	314	abandoned
DAVIS GULCH RESERVOIR	R	PARACHUTE CREEK	39	SW	NW	NE	12	5 S	96 W	S	IC*	6	198	24421	19242	9/15/1959	40069	3503	335	EXXON MOBIL CORP
MIDDLE FORK RESERVOIR	R	PARACHUTE CREEK	39	SW	NW	NE	6	5 S	95 W	S	IC*	140	31.622	24421	19242	9/17/1959	40071	3941	337	EXXON MOBIL CORP
EAST MIDDLE FORK RES	R	PARACHUTE CREEK	39	NE	NE	NW	15	5 S	95 W	S	IC*		130.56	11/10/66	09/05/52	9/17/1959	40071	3929	337	EXXON MOBIL CORP
NEW CASTLE AUGMT STATION	P	COLORADO RIVER	39	SW	NE	SW	31	5 S	90 W	S	IM*		763.94	11/10/66	09/05/52	9/12/1960	40432	1049	341	TOWN OF NEW CASTLE
MAIN ELK RESERVOIR	R	MAIN ELK CREEK	39	SE	SE	SE	15	5 S	91 W	S	IM*		34922	11/10/66	09/05/52	6/19/1963	41442	3939	343	EXXON MOBIL CORP
HUMBLE DIV FOREBAY PUMP	RPZ	COLORADO RIVER	39				7	7 S	95 W	S	CN		8582	11/10/66	09/05/52	5/22/1965	42145	943	CA4914	HUMBLE OIL+REFINING
PARACHUTE CREEK RES	R	PARACHUTE CREEK	39	SE	SE	NE	8	6 S	96 W	S	MC*		33733	12/31/1970	12/31/1969	12/15/1966	43829.42717	3943	W0252	ENCANA OIL & GAS COMPANY INC
SOUTH STARKEY GULCH RES	R	PARACHUTE CREEK	39	NW	NE	SW	32	6 S	96 W	S	IM*		5541	12/31/1972	12/31/1971	2/20/1967	44559.42784	3546	W0321	Chevron/Unical
STARKEY GULCH RESERVOIR	R	PARACHUTE CREEK	39	NE	NW	SE	31	6 S	96 W	S	IM*		7360	12/31/1972	12/31/1971	2/20/1967	44559.42784	3952	W0321	PUCKET LAND COMPNAY
GETTY W FK PARACHUTE CR	R	PARACHUTE CREEK	39	SE	NW	SE	1	5 S	97 W	S	CN*		4658	12/31/1974	12/31/1973	6/27/1967	45290.42911	3933	W2243	CHEVRON TEXACO SHALE OIL CO
RED RESERVOIR NO 1	R	WEST ELK CREEK	39			NE	32	4 S	91 W	S	I		101	12/31/1974	12/31/1973	10/30/1973	45290.45228	3946	W2387	John Salvucci
STORM KING RESERVOIR NO1	R	MITCHELL CREEK	39	SW	NW	NW	34	5 S	89 W	S	IM*	2.4	157.6	12/31/1974	12/31/1973	9/25/1974	45558	3953	W2554	STORM KING RANCH INC
KATT POND NO 1	R	EAST RIFLE CREEK	39	SW	NE	SW	2	5 S	92 W	S	IDS		50	12/31/1978	12/31/1977	9/4/1975	46751.45902	3935	W3858	Howard & Diana Vagneur
EMMER RESERVOIR NO 1	R	RIFLE CREEK	39	NW	SE	NW	30	5 S	92 W	S	IM*	1	10	12/31/1978	12/31/1977	8/9/1978	46972	3931	W3878	Rifle Creek Estates
DAVIS GULCH RESERVOIR	R	PARACHUTE CREEK	39	SW	NW	NE	12	5 S	96 W	S	IC*		996	12/31/1979	12/31/1978	9/30/1974	47116.45563	3503	79CW0378	EXXON USA & ARCO
MIDDLE FORK RESERVOIR	R	PARACHUTE CREEK	39	SW	NW	NE	6	5 S	95 W	S	IC*		1438.4	12/31/1979	12/31/1978	9/30/1974	47116.45563	3941	79CW0378	EXXON MOBIL CORP
BRUNGS PONDS	R	EAST ELK CREEK	39	SE	SW	NW	7	5 S	90 W	S	IF*		2	12/31/1979	12/31/1978	9/20/1979	47379	3921	79CW0327	HARVEY BENDER
MULVIHILL POND	R	RIFLE CREEK	39	NW	SW	NE	30	5 S	92 W	S	IR*		2.1	12/31/1980	12/31/1979	5/9/1980	47611	3511	80CW0228	KEN M GOOD IRR TRUST
FLATTOPS PROJ BEARWL RES	R	CANYON CREEK	39	NE	SW	NE	23	5 S	90 W	S	IM*		47197	12/31/1981	12/31/1980	2/27/1981	47905	3932	81CW0349	abandoned
PITTS POND	R	COLORADO RIVER	39	NW	NE	NE	9	6 S	92 W	S	IM*		2	12/31/1981	12/31/1980	9/22/1981	48112	3527	81CW0506	CARL PITTS
GEORGE POND	R	COLORADO RIVER	39	SW	NE	SE	1	6 S	93 W	S	IM*	16	16	12/31/1982	12/31/1981	7/8/1980	48212.47671	3542	82CW0068	JEFF CRAW
LOWER E MIDDLE FORK RES	R	PARACHUTE CREEK	39	SE	SW	SE	18	5 S	95 W	S	IN*		6200	12/31/1982	12/31/1981	2/2/1982	48245	3523	82CW0088	EXXON COMP
PIPER RESERVOIR NO 1	R	COLORADO RIVER	39	SW	NW	NE	12	6 S	93 W	S	IF*	2	18	12/31/1982	12/31/1981	3/31/1982	48302	3515	82CW0438	Harold Piper
PIPER RESERVOIR NO 2	R	COLORADO RIVER	39	NW	NW	NE	12	6 S	93 W	S	IF*	2	13	12/31/1982	12/31/1981	3/31/1982	48302	3516	82CW0438	R/J Hoffmeister
MAHAFFEY TERMINAL RES	R	COLORADO RIVER	39	NW	SW	SW	33	6 S	95 W	S	IM*		160	12/31/1982	12/31/1981	10/1/1982	48486	3517	82CW0355	EXXON MOBIL CORP
ALLENWATER CR TERM RES	R	COLORADO RIVER	39	NE	SE	NW	18	6 S	95 W	S	IM*		160	12/31/1982	12/31/1981	10/1/1982	48486	3519	82CW0354	EXXON MOBIL CORP
RULISON GULCH TERM RES	R	PARACHUTE CREEK	39	SE	NE	NW	11	6 S	96 W	S	IM*		160	12/31/1982	12/31/1981	10/1/1982	48486	3520	84CW0068	EXXON MOBIL CORP
SHEEP TRAIL H TERM RES	R	PARACHUTE CREEK	39	NE	SE	NW	9	6 S	95 W	S	IM*		160	12/31/1982	12/31/1981	10/1/1982	48486	3521	82CW0352	EXXON MOBIL CORP
COTTONWOOD G TERM RES	R	COTTONWOOD GULCH	39	SE	SE	NE	15	6 S	95 W	S	IM*		160	12/31/1982	12/31/1981	10/1/1982	48486	3522	82CW0351	EXXON MOBIL CORP
PARK RESERVOIR	R	WEST ELK CREEK	39	SW	SE	SW	19	4 S	91 W	S	IR*		476	12/31/1986	12/31/1985	4/1/1974	49673.45381	3507	86CW0283	LOUIS DODO
BENDER POND	R	EAST ELK CREEK	39	NE	SE	SW	6	5 S	90 W	S	PW		10	12/31/1990	12/31/1989	12/3/1990	51471	4009	90CW0332	DR HARVEY BENDER
PUDDIN'S POND	R	COLORADO RIVER	39	SE	SW	NE	1	6 S	92 W	S	DW		2	12/31/1994	12/31/1993	10/31/1988	52595.50708	3524	94CW0030	DON/ BARB CHPALIN
TAMBURELLO POND NO 1	R	COLORADO RIVER	39	SE	NW	SE	2	6 S	93 W	S	PSA		10	12/31/1994	12/31/1993	3/31/1994	52685	3554	94CW0145	Greg and Anne Tamburello
TAMBURELLO POND NO 2	R	COLORADO RIVER	39	NE	NW	SE	2	6 S	93 W	S	IPS		5	12/31/1994	12/31/1993	3/31/1994	52685	3555	94CW0145	Greg and Anne Tamburello
WILCOX POND NO 2	R	WEST ELK CREEK	39	NW	NW	NE	18	5 S	91 W	S	IP*		65	12/31/1994	12/31/1993	6/23/1994	52769	3530	94CW0220	John Wilcox
DBS POND NO 1	R	MIDDLE RIFLE CREEK	39	NW	NE	SW	25	4 S	93 W	S	RP*	1.5	1.625	12/31/1995	12/31/1994	10/31/1992	52960.52169	3531	95CW0335	Puma Paw Ranch Inc
DBS POND NO 2	R	MIDDLE RIFLE CREEK	39	NW	NE	SW	25	4 S	93 W	S	RP*	1.25	1.25	12/31/1995	12/31/1994	10/31/1992	52960.52169	3532	95CW0335	Puma Paw Ranch Inc
DBS POND NO 3	R	PARACHUTE CREEK	39	SW	SE	NW	25	4 S	93 W	S	RP*		0.85	12/31/1995	12/31/1994	10/31/1992	52960.52169	3533	95CW0335	Puma Paw Ranch Inc
RCC RESERVOIR #1	R	MIDDLE RIFLE CREEK	39	SE	SE	SW	36	4 S	93 W	S	IC*		40	12/31/1996	12/31/1995	6/5/1995	53325.53116	3560	96CW0363	Coloado Dept of Corrections
REED POND	R	MAIN ELK CREEK	39	NW	NW	NW	1	5 S	91 W	S	CP*		5	12/31/1996	12/31/1995	7/26/1996	53533	3538	96CW0277	DARREL & LILLIAN REED ESTATE
GOLDSMITH RESERVOIR NO 1	R	COLORADO RIVER	39	SW	NE	NW	7	8 S	96 W	S	IC*		700	12/31/1996	12/31/1995	11/15/1996	53645	3557	96CW0384	Centennial Marketing
LEO RESERVOIR NO 2	R	COLORADO RIVER	39		SE	SE	33	5 S	92 W	S	ISA		0.4	12/31/1996	12/31/1995	11/15/1996	53645	3937	96CW0302	S & M Associates
BOWLES POND	R	COLORADO RIVER	39	NE	SW	NW	35	5 S	90 W	S	FD*		2.5	12/31/1997	12/31/1996	7/8/1997	53880	3553	97CW0162	DOROTHY BOWLES
HUBBELL POND	R	MAIN ELK CREEK	39	SE	NE	NE	35	4 S	91 W	S	IP*		1.8	12/31/1997	12/31/1996	10/3/1997	53967	3556	97CW0259	RALPH & CONNIE HUBBELL
GOLDMAN STOCK POND NO 1	R	COZZA GULCH	39	NW	NW	SW	3	6 S	92 W	S	S		0.056	12/31/1998	12/31/1997	3/10/1995	54056.53029	3561	98CW0233	James Craig Bair Ranch Co.
GOLDMAN STOCK POND NO 2	R	COZZA GULCH	39	NW	NW	SW	3	6 S	92 W	S	S		0.056	12/31/1998	12/31/1997	3/10/1995	54056.53029	3562	98CW0233	James Craig Bair Ranch Co.
GOLDMAN STOCK POND NO 3	R	COZZA GULCH	39	NW	NW	SW	3	6 S	92 W	S	S		0.056	12/31/1998	12/31/1997	3/10/1995	54056.53029	3563	98CW0233	James Craig Bair Ranch Co.
GOLDMAN STOCK POND NO 4	R	COZZA GULCH	39	NW	NW	SW	3	6 S	92 W	S	S		0.056	12/31/1998	12/31/1997	3/10/1995	54056.53029	3564	98CW0233	James Craig Bair Ranch Co.
GOLDMAN STOCK POND NO 5	R	COZZA GULCH	39	NW	NW	SW	3	6 S	92 W	S	S		0.056	12/31/1998	12/31/1997	3/10/1995	54056.53029	3565	98CW0233	James Craig Bair Ranch Co.
LAFRENZ POND	R	HARVEY GAP	39	NE	NE	SW	25	5 S	92 W	S	IR*		1.75	12/31/1999	12/31/1998	11/1/1999	54726	3558	99CW0301	THOMAS LAFRENZ

District 39
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
DERE PIT	W	COLORADO RIVER	39										E		26.75	12/31/2000	12/31/1999	12/31/1981	54786.48212	6291	00CW0240	WESTERN MOBILE NORTHERN INC
CUSTOM CRUSHING PIT NO 1	W	COLORADO RIVER	39	SW	SE	SW	11	6	S	93	W	S	NE		73.05	12/31/2000	12/31/1999	11/1/1998	54786.54361	6292	00CW0244	Coloado Rivers Edge LLC
CREEKSIDE RANCH POND	R	MAIN ELK CREEK	39	SW	NW	NW	25	5	S	91	W	S	CD*		0.75	12/31/2000	12/31/1999	10/17/2000	55077	3585	00CW0276	JOEL T LEONARD REVOCABLE TRUST
SLAPPEY POND	L	EAST ELK CREEK	39	SW	NE	NW	25	5	S	91	W	S	PF*		4	12/31/2001	12/31/2000	1/26/2000	55152.54812	3584	01CW0262	JAMES & BRENDA SLAPPEY
GARFIELD SCHOOL DIST POND	R	COLORADO RIVER	39	NW	NW	SW	13	7	S	96	W	S	I		1.6	12/31/2001	12/31/2000	7/25/2000	55152.54993	3578	01CW0361	GARFIELD COUNTY SCHOOL DISTRICT
LESTRYA GULCH POND	R	COLORADO RIVER	39	NE	SW	NW	25	5	S	92	W	S	I		0.1	12/31/2001	12/31/2000	9/1/2001	55396	3567	01CW0285	MICHAEL WEINSTEIN
PFEIFER POND	R	COLORADO RIVER	39	SE	SE	NE	1	6	S	92	W	S	IR*		1.38	12/31/2001	12/31/2000	11/1/2001	55457	3579	01CW0325	MICHELE PFEIFER
LUTER LOWER POND	R	WEST ELK CREEK	39	SE	SE	SE	32	4	S	91	W	S	RP*		2.8	12/31/2001	12/31/2000	11/8/2001	55464	3582	01CW0356	JOSEPH LUTER
LUTER UPPER POND	R	WEST ELK CREEK	39	SE	SE	SE	32	4	S	91	W	S	RP*		4	12/31/2001	12/31/2000	11/8/2001	55464	3583	01CW0356	JOSEPH LUTER
WATERSTONE POND	R	CANYON CREEK	39	SE	SE	NW	24	5	S	90	W	S	IR*		2	12/31/2002	12/31/2001	2/28/1999	55517.5448	3566	02CW0252	GENE & CYNTHIA TREXLER
ZIEGLER POND NO. 1	R	COLORADO RIVER	39	SW	SW	SW	5	6	S	92	W	S	RP*		2.24	12/31/2002	12/31/2001	10/16/2002	55806	3581	02CW0350	DONAL & ANNETTE ZIEGLER
ZIEGLER SPRING	S	COLORADO RIVER	39	NW	SW	SW	5	6	S	92	W	S	IDS		0.033	12/31/2002	12/31/2001	10/16/2002	55806	6295	02CW0350	DONAL & ANNETTE ZIEGLER
CASEY POND NO 1	W	COLORADO RIVER	39	NW	SE	SW	11	6	S	93	W	S	NRW		11.21	12/31/2003	12/31/2002	11/29/1978	55882.47084	6380	03CW0186	Dick Casey Concrete
CASEY POND NO 2	W	COLORADO RIVER	39	NE	SE	SW	11	6	S	93	W	S	NRW		15.76	12/31/2003	12/31/2002	4/26/1989	55882.50885	6381	03CW0186	Dick Casey Concrete
CASEY POND NO 3	W	COLORADO RIVER	39	SE	NE	SW	11	6	S	93	W	S	NRW		29.71	12/31/2003	12/31/2002	4/26/1989	55882.50885	6382	03CW0186	Dick Casey Concrete

Notes:
Highlighted rows indicate conditional water right may be used for energy development water demand
Data Sources Include - Colorado Decisions Support System (CDSS) Database, Hydrobase Colorado Division of Water Resources (DWR), and personal discussion with water commissioner

District 43
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
BECKMAN DITCH	D	MOOSE CK	43		SE	SE	13	2	S	91	W	S	I	9.2	1.6	1713	1712	6/15/1900	19973.18428	537	156	YZ RANCH LLC
MARCOTT DITCH	D	SOUTH FORK	43		SE	NE	16	1	S	91	W	S	I	4.7	0.2	2476	2475	4/15/1888	20736.13985	788	163	WESTLANDS, INC
SPRUCE DITCH	D	MISSOO CK	43		SW	SW	36	1	S	91	W	S	I	1.6	0.4	7534	7506	5/25/1903	25767.19502	946	240	YZ RANCH LLP
SHERIDAN DITCH NO 3	D	CURTIS CK	43		SW	SE	7	1	N	93	W	S	I	2.5	11.3	08/17/31	08/18/30	6/15/1914	29449.23541	927	321	Unknown
E P CAMPBELL DITCH	D	DICKERVILLE CK	43		SW	SE	24	1	N	93	W	S	I	0.45	2.03	09/08/47	05/26/42	4/3/1943	34060	614	500	CORYELL, ED
SOUTH FORK PICEANCE PL	L	SOUTH FORK	43		NW	SE	36	1	S	91	W	S	IM*		70	11/26/58	09/08/47	5/29/1955	38499	2172	578	SHELL FRONTIER OIL & GAS INC.
STILLWATER POWER PLANT	L	SOUTH FORK	43		NW	SE	36	1	S	91	W	S	p		300	11/26/58	09/08/47	5/29/1955	38499	2181	576	SHELL FRONTIER OIL & GAS INC.
LOST PARK FEEDER CANAL 1	D	TRIBUTARIES-NORTH FK	43		NW	NW	19	2	N	89	W	S	IM*		100	11/21/66	11/26/58	11/9/1953	39776.37933	2296	652	Unknown
LOST PARK FEEDER CANAL 2	D	TRIBUTARIES-NORTH FK	43		NW	NE	23	2	N	90	W	S	IM*		100	11/21/66	11/26/58	11/9/1953	39776.37933	2297	652	Unknown
YELLOW JACKET CANAL	D	NORTH FORK	43		SE	NW	30	1	N	90	W	S	IM*		500	11/21/66	11/26/58	11/9/1953	39776.37933	2235	652	YELLOW JACKET DIST
ERTL PIPELINE HG 2	L	WAGON WHEEL CK	43		NE	NW	2	3	S	89	W	S	ND		1	11/21/66	11/26/58	5/26/1957	39776.39227	2626	658	Unknown
ERTL PIPELINE HG 3	L	PATTERSON CK	43				21	3	S	89	W	S	ND		7	11/21/66	11/26/58	5/26/1957	39776.39227	2627	658	Unknown
ERTL PIPELINE HG 4	L	PATTERSON CK	43		SE	NW	20	3	S	89	W	S	ND		7	11/21/66	11/26/58	5/26/1957	39776.39227	2628	658	Unknown
ERTL PIPELINE HG 1	L	BUCK CK	43			NW	8	3	S	88	W	S	ND		15	11/21/66	11/26/58	5/26/1957	39776.39227	2043	658	Unknown
NEW ARCHER WARNER DITCH	D	WHITE RIVER	43		NE	NE	29	1	S	92	W	S	I		0.69	11/21/66	11/26/58	11/21/1957	39776.39406	841	632	DC RANCH LLC
PONCA CITY PUB CO D 1	D	SOUTH FORK	43		NW	SE	23	2	S	90	W	S	I		1.12	11/21/66	11/26/58	10/22/1960	40472	1265	683	Unknown
MCLAUGHLIN PIPELINE	L	WHITE RIVER	43		SW	NW	3	1	N	102	W	S	IND		8	11/21/66	11/26/58	6/21/1961	40714	805	690	Unknown
PICEANCE CANAL	L	PICEANCE CK	43		NE	NW	4	3	S	96	W	S	IM*		50	11/21/66	11/26/58	7/10/1961	40733	2154	691	EXXON MOBIL
PICEANCE BASIN PL COLL S	L	SOUTH FORK	43		NW	SW	25	2	S	89	W	S	IM*		60	11/21/66	11/26/58	10/31/1961	40846	2152	705B	Abandoned
PATTERSON CR COLLECT SYS	L	PATTERSON CK	43		NW	NW	9	3	S	89	W	S	IM*		75	11/21/66	11/26/58	10/31/1961	40846	2146	705A	CRWCD
FLATTOPS TUNNEL	L	SOUTH FORK	43		NW	SW	25	2	S	89	W	S	IM*		254	11/21/66	11/26/58	10/31/1961	40846	2053	705C	Abandoned
MOON LAKE STALEY MINE PL	L	WHITE RIVER	43		NE	SW	11	2	N	101	W	S	N		125	11/21/66	11/26/58	11/14/1961	40860	2133	707	BLUE MT ENERGY
DOUGLAS CANAL	D	WHITE RIVER	43		NE	NE	22	2	N	101	W	S	IM*		120	11/21/66	11/26/58	7/3/1962	41091	2035	720A	Abandoned
NEW ARCHER WARNER DITCH	D	WHITE RIVER	43		NE	NE	29	1	S	92	W	S	I		2.79	11/21/66	11/26/58	8/11/1962	41130	841	723	DC RANCH LLC
K/K DITCH	D	WHITE RIVER	43		SE	SW	24	1	S	93	W	S	IPS		4	11/21/66	11/26/58	8/28/1963	41512	1146	732	POTHOLE RANCH LTD
WHITE RIVER PUMPING PL	P	WHITE RIVER	43		NW	NE	2	1	N	97	W	S	MN*		100	11/21/66	11/26/58	12/15/1963	41621	2217	737	WHEELER & PHILLIPS
MOON LAKE STALEY MINE PL	L	WHITE RIVER	43		NE	SW	11	2	N	101	W	S	N		55	11/21/66	11/26/58	4/13/1964	41741	2133	738	BLUE MT ENERGY
WHITE RIVER 14 MI CR PL	L	WHITE RIVER	43		NW	NE	32	1	N	94	W	S	IM*		200	11/21/66	11/26/58	9/12/1964	41893	2218	745	SHELL FRONTIER OIL & GAS INC.
SOUTH FORK PIPELINE	L	SOUTH FORK	43		NE	SW	28	2	S	90	W	S	IM*		100	11/21/66	11/26/58	9/14/1964	41895	2173	747	YZ RANCH LLC
WHITE RIVER PL NO 2	L	WHITE RIVER	43		NE	NE	18	1	S	91	W	S	IM*		120	11/21/66	11/26/58	10/12/1964	41923	2216	750	Unknown
COLOROW MTN STOCK WELL	W	TRIBUTARIES-NORTH FK	43		NW	NW	4	2	N	96	W	S	S		0.02	11/21/66		12/31/1964	42003	5104	755	LOVE, SAM & VIRGINIA
HUNTER CR WELLS	W	HUNTER CK	43				27	2	S	97	W	S	IM*		30	12/31/72		3/8/1967	42800	6029	W0814	EXXON MOBIL
SUPERIOR OIL PL	L	WHITE RIVER	43		NW	NW	2	1	N	97	W	S	X		12	12/31/69	06/06/69	5/14/1968	43621.43233	2188	W0015	SUPERIOR OIL CO
BLACKS GULCH PIPELINE	L	WHITE RIVER	43		SW	SW	5	1	N	96	W	S	IM*		100	12/31/69	06/06/69	9/1/1968	43621.43343	2009	W0015-69	SUPERIOR OIL CO
CROOKED WASH P.L.	L	WHITE RIVER	43		SE	SW	35	3	N	98	W	S	IM*		100	12/31/69	06/06/69	9/1/1968	43621.43343	2030	W0015-69	SUPERIOR OIL CO
KELLOG GULCH P.L.	L	WHITE RIVER	43		SE	NW	9	1	N	96	W	S	IM*		100	12/31/69	06/06/69	9/1/1968	43621.43343	2098	W0015-69	SUPERIOR OIL CO
WRAY GULCH PIPELINE	L	WHITE RIVER	43				35	2	N	97	W	S	IM*		100	12/31/69	06/06/69	9/1/1968	43621.43343	2230	W0015-69	SUPERIOR OIL CO
SUPERIOR PUMPBACK PL 1	P	WHITE RIVER	43		NE	NE	1	1	N	102	W	S	IM*		12	12/31/69	06/06/69	10/5/1968	43621.43377	2189	W0016-69	Unknown
SUPERIOR PUMPBACK PL 2	P	WHITE RIVER	43		NW	NE	9	1	N	102	W	S	IM*		12	12/31/69	06/06/69	10/5/1968	43621.43377	2190	W0016-69	Unknown
SUPERIOR PUMPBACK PL 3-1	P	WHITE RIVER	43		NW	NE	34	2	N	101	W	S	IM*		12	12/31/69	06/06/69	10/5/1968	43621.43377	2191	W0017-69	Unknown
WHITE R PICEANCE PL	L	WHITE RIVER	43		SE	SW	25	1	N	96	W	S	IM*		100	12/31/70	12/31/69	8/5/1966	43829.42585	2219	W0225	WILSON, WALTER & CAMERON, THOM
SUPERIOR OIL PL	L	WHITE RIVER	43		NW	NW	2	1	N	97	W	S	IM*		12	12/31/70	12/31/69	5/14/1968	43829.43233	2188	W0182-70	SUPERIOR OIL CO
WHITE R FIGURE FOUR PL	L	WHITE RIVER	43		NW	NE	26	1	N	96	W	S	IM*		70	12/31/70	12/31/69	6/10/1968	43829.4326	2046	W0196-70	PUCKETT LAND CO
WOLF RIDGE FEEDER PL	L	WHITE RIVER	43		NE	NW	34	2	N	97	W	S	IM*		100	12/31/71	12/31/70	11/19/1966	44194.42691	2228	W0459	EHS MANAGER, NATURAL SODA INC
OHIO ERTL PL	L	WHITE RIVER	43		NE	NW	2	1	N	97	W	S	IM*		55	12/31/71	12/31/70	2/28/1967	44194.42792	2144	W0280-71	TOSCO CORP
STORY G PARACHUTE PL	L	WHITE RIVER	43		SW	SE	33	1	N	93	W	S	IM*		55	12/31/71	12/31/70	2/28/1967	44194.42792	2182	W0279-71	TOSCO CORPORATION
ELK CREEK DITCH	D	ELK CK	43		SW	SE	23	1	S	92	W	S	IDS		2	12/31/71	12/31/70	5/7/1971	44321	623	W0460-71	ELK CREEK RANCH OWNERS ASSOC
CROSS SPG NO 2	S	WEST DOUGLAS CK	43		NE	NW	7	5	S	101	W	S	DS	0.006	0.005	12/31/72	12/31/71	12/31/1918	44559.25201	1355	W1530-72	Unknown
TRAIL CANYON SPG NO 2	S	TRAIL CANYON CK	43		NE	SE	31	4	S	102	W	S	IDS	0.011	0.011	12/31/72	12/31/71	12/31/1957	44559.39446	1364	W1698-72	Unknown

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township	Range	P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
CLAUDE SHULTS SEEPAGE	E	TRIBUTARIES	43				25	1 N	95 W	S	PS	0.1	0.8	12/31/72	12/31/71	6/28/1958	44559.39625	1414	W1768-72	MERRIAM JOE
PRATHER SPG NO 7	S	TRIBUTARIES	43		NW	SW	10	1 S	92 W	S	DS		0.002	12/31/72	12/31/71	12/31/1965	44559.42368	1429	W1443-72	Unknown
WOLF CK PL	L	WHITE RIVER	43		SE	SW	26	3 N	99 W	S	IM*		70	12/31/72	12/31/71	9/30/1971	44559.44467	2227	W1704-72	PHILLIPS, L E
MOELLER SPG NO 1	S	MOELLER CREEK	43		NE	SW	17	1 N	90 W	S	ID		0.01	12/31/72	12/31/71	2/2/1972	44592	2130	W0540	Unknown
JOSH SPG & PL 2	S	WEST DOUGLAS CK	43		SW	NW	32	4 S	101 W	S	IDS		0.1	12/31/72	12/31/71	5/17/1972	44697	2094	W1525	Unknown
BIG FOUNDATION SPG 6	S	BIG FOUNDATION CK	43		NW	NW	11	5 S	102 W	S	S		0.009	12/31/72	12/31/71	5/18/1972	44698	1446	W1542-72	Unknown
BIG FOUNDATION SPG 8	S	BIG FOUNDATION CK	43		SE	NE	10	5 S	102 W	S	S		0.011	12/31/72	12/31/71	5/18/1972	44698	1371	W1535-72	Unknown
CORRAL SPG NO 1	S	WEST CK	43		SE	NE	9	5 S	102 W	S	S		0.011	12/31/72	12/31/71	5/18/1972	44698	1430	W1540-72	Unknown
BIG FOUNDATION SPG 7	S	BIG FOUNDATION CK	43		NW	NW	11	5 S	102 W	S	IS		0.111	12/31/72	12/31/71	5/18/1972	44698	1370	W1532-72	Unknown
LEWIS DITCH	D	EAST DOUGLAS CK	43			SW	8	3 S	100 W	S	IP*		0.5	12/31/72	12/31/71	12/14/1972	44908	1041	W1739-72	C LAZY S RANCH
COLO MIN WELL NO 14-1	W	YELLOW CK	43		NW	NE	14	1 S	98 W	S	NDS	0.06	4.94	12/31/73	12/31/72	2/28/1967	44925.42792	6012	W1923	Unknown
COLO MIN WELL NO 28-1	W	YELLOW CK	43		NE	NW	28	1 S	98 W	S	NDS	0.06	4.94	12/31/73	12/31/72	2/28/1967	44925.42792	6013	W1922	Unknown
DUNN WELL NO 20-1	W	YELLOW CK	43		NE	NE	20	1 S	98 W	S	NDS	0.06	4.94	12/31/73	12/31/72	2/28/1967	44925.42792	6017	W1925	Unknown
SAVAGE WELL NO 24-1	W	YELLOW CK	43		NE	NE	24	1 S	98 W	S	NDS	0.06	4.94	12/31/73	12/31/72	2/28/1967	44925.42792	6072	W1924	Unknown
STRAWBERRY CREEK PL	L	WHITE RIVER	43		SE	SW	29	1 N	94 W	S	IM*		400	12/31/73	12/31/72	6/16/1972	44925.44727	2183	W2137-73	CRWCD
WRAY GULCH PIPELINE	L	WHITE RIVER	43		NE	SE	35	2 N	97 W	S	IM*		450	12/31/73	12/31/72	7/19/1972	44925.4476	2229	W2139-73	CRWCD
MISSOURI CK W A SPG 1	S	MISSOURI CK	43		NE	NW	30	4 S	102 W	S	S		0.45	12/31/74	12/31/73	12/21/1940	45290.33227	2127	W2248-74	Unknown
LAKE AVERY WELL	W	BIG BEAVER CK	43		NW	NE	18	1 S	91 W	S	D		0.055	12/31/74	12/31/73	1/15/1973	45290.4494	6039	W2360-74	COLO DOW
BEL AIRE WELL	W	TRIBUTARIES-SOUTH FK	43		NE	NW	17	1 S	91 W	S	P		1	12/31/74	12/31/73	1/15/1973	45290.4494	6001	W2360-74	COLO DOW
KRAMER SPG NO 1	S	STRAWBERRY CK	43		NE	NW	26	3 N	95 W	S	IS		2	12/31/74	12/31/73	7/1/1973	45290.45107	2105	W2466-74	Unknown
MEAGHER DIVERSION	D	WHITE RIVER	43		SE	SE	13	1 N	104 W	S	ND		20	12/31/74	12/31/73	1/17/1974	45307	2126	W2205	PREAS FAMILY LLC & MARY LIGHT
NEEDYS GULCH SPG NO 4	S	SHEEP CK	43		SW	SE	33	1 S	94 W	S	DS		0.022	12/31/72	12/31/73	5/1/1974	45411	2136	W1560-72	Unknown
UNNAMED SPRING NO 5	S	SHEEP CK	43		SE	SW	21	1 S	94 W	S	DS		0.022	12/31/72	12/31/73	5/1/1974	45411	2209	W1560-72	Unknown
HELEN JENSEN WELL NO 7	W	NINE MILE DRAW	43		NE	NE	24	2 N	93 W	S	IDS		0.33	12/31/74	12/31/73	9/12/1974	45545	6021	W2427-74	Unknown
DOUGLAS CANAL	D	WHITE RIVER	43		NE	NE	22	2 N	101 W	S	IM*		500	12/31/75	12/31/74	7/25/1974	45655.45496	2035	W2635-75	Abandoned
INDUST RES WELL D-14-1-1	W	YELLOW CK	43		SE	NE	14	1 S	98 W	S	IM*		5	12/31/75	12/31/74	11/8/1974	45655.45602	6030	W2886	WHITE R NAHCOLITE
INDUST RES WELL D-14-1-2	W	YELLOW CK	43		SE	NE	14	1 S	98 W	S	IM*		5	12/31/75	12/31/74	11/8/1974	45655.45602	6031	W2885	WHITE R NAHCOLITE
INDUST RES WELL D-20-1-1	W	TRIBUTARIES	43		SW	NE	20	1 S	98 W	S	IM*		5	12/31/75	12/31/74	11/8/1974	45655.45602	6032	W2884	WHITE R NAHCOLITE
INDUST RES WELL D-20-1-2	W	TRIBUTARIES	43		NE	NE	20	1 S	98 W	S	IM*		5	12/31/75	12/31/74	11/8/1974	45655.45602	6033	W2887	WHITE R NAHCOLITE
MEADOW SPG NO 2	S	COAL CK	43		SW	NW	22	1 N	93 W	S	DS		0.033	12/31/75	12/31/74	2/26/1975	45712	2124	W2667-75	Unknown
MEADOW SPG NO 3	S	COAL CK	43		NW	SW	22	1 N	93 W	S	DS		0.033	12/31/75	12/31/74	2/26/1975	45712	2125	W2667-75	Unknown
MEADOW SPG NO 1	S	COAL CK	43		SW	NE	21	1 N	93 W	S	DS		0.066	12/31/75	12/31/74	2/26/1975	45712	2123	W2667-75	Unknown
EAST FAWN CK WELL NO 1	W	FAWN CK	43		NE	NW	27	3 S	98 W	S	DS		0.033	12/31/75		9/1/1975	45899	6018	W2782-75	Unknown
PENROSE SPG NO 2	S	TRIBUTARIES	43		NW	NW	36	1 N	95 W	S	DS		0.02	12/31/75	12/31/74	9/26/1975	45924	1552	W2790-75	Unknown
GERALD DAUM SPR NO 2	S	TRIBUTARIES-SOUTH FK	43		NE	SW	21	1 S	91 W	S	IDS		0.033	12/31/76	12/31/75	8/10/1976	46243	2062	W3158-76	Unknown
GERALD DAUM SPR NO 3	S	TRIBUTARIES-NORTH FK	43		NE	SW	21	1 S	91 W	S	IDS		0.033	12/31/76	12/31/75	8/10/1976	46243	2063	W3159-76	Unknown
NORTH FORK FDR CONDUIT	L	NORTH FORK	43		NW	NE	22	1 N	90 W	S	IM*		500	12/31/76	12/31/75	10/7/1976	46301	2137	W3245	YELLOW JACKET DIST
OLDLAND BROS WELL I-4	W	TRIBUTARIES-PICEANCE CK	43		NW	NE	11	3 S	96 W	S	IC*	0.495	0.352	12/31/77	12/31/76	4/1/1955	46386.38441	6053	W3500	Conoco et. al
TG 71-5 WELL	W	TRIBUTARIES-PICEANCE CK	43		NE	NE	33	3 S	96 W	S	IN*		1.111	12/31/77	12/31/76	11/29/1971	46386.44527	6115	W3563-77	Conoco
TG 71-4 WELL	W	TRIBUTARIES-PICEANCE CK	43		SW	NW	6	4 S	96 W	S	IN*		0.888	12/31/77	12/31/76	12/3/1971	46386.44531	6114	W3562-77	Conoco
TG 71-3 WELL	W	TRIBUTARIES-PICEANCE CK	43		NE	NW	29	3 S	96 W	S	IN*		0.444	12/31/77	12/31/76	12/13/1971	46386.44541	6113	W3561-77	Conoco
BUTE NO 25 WELL	W	STEWART GULCH	43		SE	NE	9	4 S	96 W	S	IC*	0.11	0.704	12/31/77	12/31/76	5/8/1972	46386.44688	6005	W3499	Conoco
LIBERTY BELL WELL NO 12	W	TRIBUTARIES-PICEANCE CK	43		SE	SE	18	4 S	95 W	S	IC*		0.888	12/31/77	12/31/76	12/5/1972	46386.44899	6109	W3578-77	Conoco
CAMP BIRD WELL 12	W	TRIBUTARIES-PICEANCE CK	43		NE	NE	9	4 S	95 W	S	IN*		0.444	12/31/77	12/31/76	9/6/1973	46386.45174	6106	W3575-77	Conoco
CAMP BIRD WELL 12A	W	TRIBUTARIES-PICEANCE CK	43		NE	NE	9	4 S	95 W	S	IN*		0.444	12/31/77	12/31/76	10/4/1973	46386.45202	6105	W3577-77	Conoco
SG 20 WELL	W	TRIBUTARIES-PICEANCE CK	43		SW	SE	31	2 S	96 W	S	IN*		1.333	12/31/77	12/31/76	12/1/1974	46386.45625	6111	W3543-77	Conoco
OAK RIDGE PARK DITCH	D	WHITE RIVER	43		NE	SW	14	1 S	93 W	S	IDS	2	6	12/31/77	12/31/76	4/17/1977	46493	848	W3688-77	MCGRAW DAVE
SULLIVAN SPG NO 3	S	TRIBUTARIES	43		SW	NW	7	1 S	94 W	S	DS		0.099	12/31/77	12/31/76	4/29/1977	46505	2187	W3380-77	Unknown
OHIO WELL NO 41	W	WILLOW CK of PICEANCE CK	43		NW	SW	25	4 S	98 W	S	IN*		0.044	12/31/77	12/31/76	8/22/1977	46620	6110	W3576-77	Conoco

District 43
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
JENSEN PUMP & PIPELINE	P	WHITE RIVER	43		NW	NE	32	1	N	94	W	S	IM*		5	12/31/77	12/31/76	9/20/1977	46649	2079	W3658	JENSEN RANCH, LTD
NIBLOCK DITCH	D	WHITE RIVER	43		NE	SE	28	1	N	94	W	S	I	16	19	12/31/77	12/31/76	12/30/1977	46750	842	W3661	STURGEON, ILA
MILLER CREEK PUMPING PL	P	WHITE RIVER	43		NW	NW	30	1	S	92	W	S	IM*		100	12/31/79	12/31/78	9/30/1976	47116.46294	2430	79CW0355	TOSCO CORPORATION
RANGELY SEWAGE SYSTEM	S	WHITE RIVER	43		NW	SE	35	2	N	102	W	S	IM*	2	1.1	12/31/80	12/31/79	10/1/1976	47481.46295	2342	80CW0454	RANGELY SANITATION D
TIPP DITCH	D	EAST DOUGLAS CK	43		NW	NW	13	4	S	101	W	S	I		3.36	12/31/80	12/31/79	4/4/1980	47576	2259	80CW0087	WITHERS, W RUSSELL
LATHAN DITCH	D	YELLOW CK	43		NW	SE	30	1	S	98	W	S	IN*		0.208	12/31/80	12/31/79	7/29/1980	47692	756	80CW0458	COLO DOW
UPPER WOLF CREEK WELL 2	W	WOLF CK	43		SE	SW	11	5	N	100	W	S	IDS		0.088	12/31/80	12/31/79	8/17/1980	47711	6187	80CW0495	Unknown
UPPER WOLF CREEK WELL 3	W	WOLF CK	43		NE	NE	15	5	N	100	W	S	IDS		0.1	12/31/80	12/31/79	8/17/1980	47711	6188	80CW0495	Unknown
UPPER WOLF CREEK WELL 4	W	WOLF CK	43		NW	NW	14	5	N	100	W	S	IDS		0.1	12/31/80	12/31/79	8/17/1980	47711	6189	80CW0495	Unknown
UPPER WOLF CREEK WELL 1	W	WOLF CK	43		SW	SW	11	5	N	100	W	S	IDS		0.11	12/31/80	12/31/79	8/17/1980	47711	6186	80CW0495	Unknown
NORTHERN SPG NO 1	S	CURTIS CK	43		NE	SW	21	2	N	93	W	S	IN*		0.1	12/31/80	12/31/79	8/18/1980	47712	2340	80CW0429	Unknown
MEEKER WELL B 5	W	WHITE RIVER	43		SW	SE	33	1	N	93	W	S	IM*	1.22	0.11	12/31/80	12/31/79	11/3/1980	47789	6139	80CW0544	Unknown
MEEKER WELL B 7	W	WHITE RIVER	43		SW	SE	33	1	N	93	W	S	IM*		1.33	12/31/80	12/31/79	11/3/1980	47789	6137	80CW0544	Unknown
MEEKER WELL B 6	W	WHITE RIVER	43		SW	SE	33	1	N	93	W	S	IM*		1.33	12/31/80	12/31/79	11/3/1980	47789	6138	80CW0544	Unknown
MEEKER WELL B 8	W	WHITE RIVER	43		SW	SE	33	1	N	93	W	S	IM*		1.33	12/31/80	12/31/79	11/3/1980	47789	6142	80CW0544	Unknown
MMC-IRI WELL 4	W	YELLOW CK	43		SE	SE	23	1	S	98	W	S	IM*		1	12/31/82	12/31/81	1/31/1981	48212.47878	5052	82CW0429	Unknown
MMC-IRI WELL 5	W	YELLOW CK	43		SW	SE	23	1	S	98	W	S	IM*		1	12/31/82	12/31/81	1/31/1981	48212.47878	5064	82CW0429	Unknown
MMC-IRI WELL 6	W	YELLOW CK	43		SE	SE	23	1	S	98	W	S	IM*		1	12/31/82	12/31/81	3/31/1981	48212.47937	5065	82CW0429	Unknown
MMC-IRI WELL 7	W	YELLOW CK	43		SE	SE	23	1	S	98	W	S	IM*		1	12/31/82	12/31/81	4/30/1981	48212.47967	5066	82CW0429	Unknown
MMC-IRI WELL 8	W	YELLOW CK	43		SE	SE	23	1	S	98	W	S	IM*		1	12/31/82	12/31/81	5/31/1981	48212.47998	5067	82CW0429	Unknown
COLO WHITE R HYDRO PLANT	L	WHITE RIVER	43		NW	NE	28	1	S	92	W	S	p		500	12/31/82	12/31/81	11/17/1981	48212.48168	1392	82CW0188	YELLOW JACKET DIST
JAYS N E SPG	S	TRIBUTARIES	43		NE	NW	25	1	N	95	W	S	DS		0.1	12/31/82	12/31/81	7/2/1982	48395	2437	82CW0157	ORRIS, JOHN
TAYLOR DRAW PWR CONDUIT	L	WHITE RIVER	43		SW	SE	27	2	N	101	W	S	p	125	775	12/31/82	12/31/81	10/22/1982	48507	2571	82CW0383	RIO BLANCO WCD
ROBERT SPRING	S	LITTLE BEAVER CK	43		SE	NE	28	1	N	92	W	S	D	0.25	0.25	12/31/83	12/31/82	2/2/1983	48610	2439	83CW0056	KRACHT, SCOTT
FRASER DITCH	D	TRIBUTARIES-NORTH FK	43		NE	SE	30	1	N	90	W	S	IS		3	12/31/83	12/31/82	6/1/1983	48729	648	83CW0337	UTE PROPERTIES INC
GETTY SPRING 3B	S	WILLOW CK of PICEANCE CK	43		NW	NW	9	5	S	97	W	S	IM*	0.033	0.637	12/31/83	12/31/82	7/1/1983	48759	1135	83CW0365	Chevron
MOBIL PUMP STATION PL	P	WHITE RIVER	43		SW	SE	34	2	S	101	W	S	X		200	12/31/84	12/31/83	5/4/1984	49067	1339	84CW0109	EXXON MOBIL
BASIN SPRING NO 1	S	EAST EVACUATION CK	43		NE	SW	12	5	S	103	W	S	S		0.01	12/31/88	12/31/87	6/9/1987	50403.50198	1743	88CW0392	Unknown
BASIN SPRING NO 2	S	EAST EVACUATION CK	43		SW	NW	12	5	S	103	W	S	S		0.01	12/31/88	12/31/87	6/9/1987	50403.50198	1744	88CW0392	Unknown
BASIN SPRING NO 4	S	EAST EVACUATION CK	43		NW	SE	10	5	S	103	W	S	DS		0.03	12/31/88	12/31/87	6/9/1987	50403.50198	1746	88CW0392	Unknown
CC SPRING NO 4	S	COW CANYON CK	43		NE	NW	26	5	S	103	W	S	S		0.03	12/31/88	12/31/87	8/18/1987	50403.50268	1739	88CW0392	Unknown
NATEC MINERALS AUG AND EXCH	P	PICEANCE CK	43					1	S	98	W	S	IC*		6.63	12/31/88	12/31/87	4/5/1988	50499	7012	88CW0420	Unknown
LARSON DITCH	D	PICEANCE CK	43		SW	NW	3	4	S	94	W	S	IC*		10	32508	32142	4/5/1988	50499	754	88CW0420	EHS MANAGER, NATURAL SODA INC
LARSON FEEDER DITCH	D	TRIBUTARIES-PICEANCE CK	43		SW	NE	33	3	S	94	W	S	IC*		10	32508	32142	4/5/1988	50499	1798	88CW0420	WHITE R NAHCOLITE
CABIN VALLEY SPRING NO 2	S	EAST EVACUATION CK	43		SE	NW	13	5	S	103	W	S	S		0.01	32508	32142	5/1/1988	50525	1741	88CW0392	Unknown
CABIN VALLEY SPRING NO 3	S	EAST EVACUATION CK	43		NW	NW	13	5	S	103	W	S	S		0.01	32508	32142	5/1/1988	50525	1742	88CW0392	Unknown
CABIN VALLEY SPRING NO 1	S	EAST EVACUATION CK	43		SE	NW	13	5	S	103	W	S	DS		0.03	32508	32142	5/1/1988	50525	1740	88CW0392	Unknown
SWEPI SPRING 8	S	SPRUCE GULCH	43		NW	SW	14	2	S	100	W	S	IN*		0.011	32508	32142	6/13/1988	50568	1794	88CW0363	Shell
SWEPI SPRING 9	S	SPRUCE GULCH	43		NE	SE	14	2	S	100	W	S	IN*		0.011	32508	32142	6/13/1988	50568	1795	88CW0363	Shell
SWEPI SPRING 5	S	WATER GULCH	43		NE	SE	6	2	S	99	W	S	IN*		0.044	32508	32142	6/13/1988	50568	1791	88CW0363	Shell
SWEPI SPRING 7	S	CORRAL GULCH	43		SW	NW	7	2	S	99	W	S	IN*		0.078	32508	32142	6/13/1988	50568	1793	88CW0363	Shell
SWEPI SPRING 3	S	WATER GULCH	43		SE	NW	6	2	S	99	W	S	IN*		0.178	32508	32142	6/13/1988	50568	1790	88CW0363	Shell
SWEPI SPRING 6	S	CORRAL GULCH	43		NE	NW	7	2	S	99	W	S	IN*		0.178	32508	32142	6/13/1988	50568	1792	88CW0363	Shell
SWEPI SPRING 13	S	STAKE SPRINGS CK	43		NW	NW	36	2	S	100	W	S	IN*		0.222	32508	32142	6/13/1988	50568	1797	88CW0363	Shell
SWEPI SPRING 2	S	WATER GULCH	43		NE	SW	2	2	S	100	W	S	IN*		0.233	32508	32142	6/13/1988	50568	1789	88CW0363	Shell
SWEPI SPRING 1	S	DUCK CK	43		SW	SW	25	1	S	100	W	S	IN*		0.367	32508	32142	6/13/1988	50568	1788	88CW0363	Shell
SWEPI SPRING 10	S	SPRUCE GULCH	43		SE	SE	14	2	S	100	W	S	IN*		0.489	32508	32142	6/13/1988	50568	1796	04CW0041	Shell
POCKET SPRING NO 1	S	EAST EVACUATION CK	43		SE	SW	7	5	S	102	W	S	DS		0.01	32508	32142	9/21/1988	50668	1736	88CW0392	Unknown
POCKET SPRING NO 2	S	EAST EVACUATION CK	43		SE	SW	7	5	S	102	W	S	DS		0.02	32508	32142	9/21/1988	50668	1737	88CW0392	Unknown

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Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township	Range	P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
M-3 SPRING & SEEP	S	DUCK CK	43		NW	NE	25	1 S	100 W	S	NFD		0.1	32508	32142	12/5/1988	50743	1825	88CW0446	SHELL FRONTIER OIL & GAS INC.
COTTONWOOD SPRING	S	DUCK CK	43		NW	SW	19	1 S	99 W	S	NFD		1.503	32508	32142	12/5/1988	50743	1829	88CW0446	SHELL FRONTIER OIL & GAS
BIG DUCK CK PUMP & PL	P	DUCK CK	43		NW	NW	30	1 S	99 W	S	NFD		10	32508	32142	12/5/1988	50743	1828	88CW0446	SHELL FRONTIER OIL & GAS INC
M-4 SPRING & SEEP	S	DUCK CK	43		SE	NE	25	1 S	100 W	S	NFD		0.056	32508	32142	12/6/1988	50744	1826	88CW0446	SHELL FRONTIER OIL & GAS INC
M-5 SPRING & SEEP	S	DUCK CK	43		SE	NE	25	1 S	100 W	S	NFD		1	32508	32142	12/6/1988	50744	1827	88CW0446	SHELL FRONTIER OIL & GAS
MCDOWELL NO 2 DITCH	D	WHITE RIVER	43		SE	NE	26	1 N	96 W	S	I	5	1	34334	33969	4/23/1991	52230.51612	1855	93CW0136	Unknown
RIO BLANCO RANCH WELL 1	W	NORTH FORK	43		NE	NE	29	1 N	88 W	S	IC		0.089	34334	33969	8/17/1992	52230.52094	5051	93CW0312	Unknown
CYNDA WELL	W	RYAN GULCH	43		NE	NW	36	2 S	99 W	S	DS		0.033	34334	33969	12/1/1993	52565	5077	93CW0309	NORELL, FRANKLIN
VICKY WELL	W	RYAN GULCH	43		NW	NW	36	2 S	99 W	S	DS		0.033	34334	33969	12/1/1993	52565	5078	93CW0309	NORELL, FRANKLIN
DEE WELL	W	RYAN GULCH	43		SE	SE	26	2 S	99 W	S	DS		0.033	34334	33969	12/1/1993	52565	5079	93CW0309	NORELL, FRANKLIN & BLM
NORELL WELL	W	RYAN GULCH	43		SE	NW	26	2 S	99 W	S	DS		0.033	34334	33969	12/1/1993	52565	5080	93CW0309	NORELL, FRANKLIN
REAGLE WELL	W	RYAN GULCH	43		NW	SE	19	2 S	98 W	S	DS		0.033	34334	33969	12/1/1993	52565	5082	93CW0309	NORELL, FRANKLIN
BLACK SULPHUR SPRING	S	BLACK SULPHUR CK	43		NW	SW	33	2 S	98 W	S	IDS	0.022	0.022	35064	34699	1/1/1995	52961	1091	95CW0121	MANTLE, TIM
MARY ELLEN KELLY SPG 3	S	BIG BEAVER CK	43		SE	SW	19	1 N	91 W	S	S		0.01	35430	35064	4/23/1992	53325.51978	1198	96CW0327	Unknown
WILCOXSON DITCH #2	D	TRIBUTARIES-PICEANCE CK	43		SE	NW	19	3 S	93 W	S	IF*		1	35795	35430	3/1/1991	53691.51559	1127	97CW0087	Unknown
WILCOXSON DITCH #1	D	TRIBUTARIES-PICEANCE CK	43		SW	SE	19	3 S	93 W	S	IF*		1.5	35795	35430	3/1/1991	53691.51559	1126	97CW0086	Unknown
OWENS DITCH	D	SHEEP CK	43		NE	SE	29	1 S	94 W	S	IS	1	1	36160	35795	2/13/1998	54100	2481	98CW0015	HILL, MARK
ROBERT E BARBOUR PL	L	MARVINE CK	43		SW	SE	26	1 N	90 W	S	CD		0.029	36160	35795	2/25/1998	54112	904	98CW0307	MARVINE RANCH LLC
STRAWBERRY L&C DITCH 1	D	STRAWBERRY CK	43		NW	SE	10	3 N	95 W	S	I		0.25	36160	35795	6/14/1998	54221	2515	98CW0273	Unknown
STRAWBERRY L&C DITCH 4	D	STRAWBERRY CK	43		NE	SW	15	3 N	95 W	S	I		0.25	36160	35795	6/14/1998	54221	2518	98CW0273	Unknown
STRAWBERRY L&C DITCH 2	D	STRAWBERRY CK	43		SE	SW	10	3 N	95 W	S	I		0.75	36160	35795	6/14/1998	54221	2516	98CW0273	Unknown
STRAWBERRY L&C DITCH 3	D	STRAWBERRY CK	43		NW	NW	15	3 N	95 W	S	I		1	36160	35795	6/14/1998	54221	2517	98CW0273	Unknown
THIRTEEN MILE SEEP AREA	E	THIRTEEN MILE CK	43		SE	SW	32	2 S	94 W	S	ID*		0.001	36160	35795	8/12/1998	54280	2549	98CW0139	RED NAPE TERCEL LLC
WATER SUPPLY WELL	W	THIRTEEN MILE CK	43		SE	SW	32	2 S	94 W	S	IDS		0.033	36160	35795	8/12/1998	54280	5088	98CW0139	RED NAPE TERCEL LLC
ROBISON PL	L	THIRTEEN MILE CK	43		NW	SE	32	2 S	94 W	S	D		0.22	36160	35795	8/12/1998	54280	2548	98CW0139	RED NAPE TERCEL LLC
BEAR POND DITCH	D	FLAG CK	43		NE	SW	25	2 S	94 W	S			1	36160	35795	9/30/1998	54329	2521	98CW0309	RITCHIE, JAMES
HOWEY DITCH	D	FLAG CK	43		NW	NW	11	2 S	94 W	S			2	36160	35795	9/30/1998	54329	705	98CW0309	RITCHIE, JAMES
YONCH DITCH	D	FLAG CK	43		NW	NW	14	2 S	94 W	S			2	5/10/1889		9/30/1998	54329	1024	72	RITCHIE, JAMES
HOBACK & REDPATH D	D	FLAG CK	43		SE	NE	26	2 S	94 W	S			2.5	36160	35795	9/30/1998	54329	698	98CW0309	RITCHIE, JAMES
YELLOW CREEK NO .6	D	YELLOW CK	43		NE	SE	20	1 S	98 W	S	IN*		0.7	36160	35795	10/29/1998	54358	2664	98CW0252	ENCANA OIL & GAS, INC
YELLOW CREEK NO .5	D	YELLOW CK	43		SW	NE	29	1 S	98 W	S	IN*		1.15	36160	35795	10/29/1998	54358	2663	98CW0252	ENCANA OIL & GAS, INC
YELLOW CREEK NO. 4	D	STAKE SPRINGS CK	43		NE	SW	29	1 S	98 W	S	IN*		2.1	36160	35795	10/29/1998	54358	2662	98CW0252	ENCANA OIL & GAS, INC
CORRAL GULCH NO. 1	D	CORRAL GULCH	43		SW	NE	35	1 S	99 W	S	IN*		3.13	36160	35795	10/29/1998	54358	2667	98CW0252	ENCANA OIL & GAS, INC
YELLOW CREEK NO .7	D	YELLOW CK	43		NW	NE	21	1 S	98 W	S	IN*		3.36	36160	35795	10/29/1998	54358	2665	98CW0252	ENCANA OIL & GAS, INC
YELLOW CREEK NO .8	D	YELLOW CK	43		SW	NW	15	1 S	98 W	S	IN*		4.32	36160	35795	10/29/1998	54358	2666	98CW0252	ENCANA OIL & GAS, INC
STAKE SPRINGS NE	S	STAKE SPRINGS CK	43		SW	NW	14	2 S	99 W	S	IN*	0.31	1.19	36160	35795	11/9/1998	54369	2661	98CW0252	ENCANA OIL & GAS, INC
STAKE SPRINGS SW	S	STAKE SPRINGS CK	43		SW	NW	14	2 S	99 W	S	IN*	0.25	1.25	36160	35795	11/9/1998	54369	2660	98CW0252	ENCANA OIL & GAS, INC
DRY FORK DITCH NO. 1	D	PICEANCE CK	43		SE	SW	36	1 N	97 W	S	IN*	0.35	4.15	36160	35795	11/9/1998	54369	2658	98CW0251	Unknown
DRY FORK DITCH NO. 2	D	PICEANCE CK	43		SE	SE	35	1 N	97 W	S	IN*	0.55	5.45	36160	35795	11/9/1998	54369	2659	98CW0251	Unknown
EXXON THIRTEEN MILE CREEK D	D	THIRTEEN MILE CK	43		SW	SW	33	2 S	94 W	S	IM*		1	36160		11/17/1998	54377	2575	98CW0259	EXXON MOBIL CORP
EXXON UPPER FAWN CREEK DIVE	D	FAWN CK	43		SW	NE	22	3 S	98 W	S	IM*		1	36160	35795	11/17/1998	54377	2578	98CW0259	EXXON MOBIL CORP
EXXON UPPER BLACK SULPHUR C	D	BLACK SULPHUR CK	43		SE	NW	5	3 S	98 W	S	IM*		1	36160	35795	11/17/1998	54377	2580	98CW0259	EXXON MOBIL CORP
EXXON UPPER DRY FORK DIVERS	D	TRIBUTARIES-PICEANCE CK	43		SE	SW	4	2 S	95 W	S	IC*		1	36160	35795	11/17/1998	54377	2586	98CW0259	EXXON MOBIL CORP
EXXON DUCK CREEK DIVERSION	D	DUCK CK	43		SE	NW	12	1 S	99 W	S	IC*		1	36160	35795	11/17/1998	54377	2589	98CW0259	EXXON MOBIL CORP
EXXON CORRAL CREEK DIVERSIO	D	CORRAL GULCH	43		SE	NW	35	1 S	99 W	S	IC*		1	36160	35795	11/17/1998	54377	2590	98CW0259	EXXON MOBIL CORP
EXXON RYAN GULCH DIVERSION	D	RYAN GULCH	43		NW	NE	25	2 S	99 W	S	IC*		1	36160	35795	11/17/1998	54377	2591	98CW0259	EXXON MOBIL CORP
EXXON WILLOW CREEK DIVERSIO	D	WILLOW CK of PICEANCE CK	43		NW	SE	4	4 S	97 W	S	IM*		2	36160	35795	11/17/1998	54377	2576	98CW0259	EXXON MOBIL CORP
EXXON HUNTER CREEK DIVERSIO	D	HUNTER CK	43		NW	SW	31	3 S	97 W	S	IM*		2	36160		11/17/1998	54377	2577	98CW0259	EXXON MOBIL CORP
EXXON LOWER FAWN CK DIV	D	FAWN CK	43		SE	SW	30	2 S	97 W	S	IM*		2	36160		11/17/1998	54377	2579	98CW0259	EXXON MOBIL CORP

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Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
EXXON MID BLK SULPHUR DI	D	BLACK SULPHUR CK	43		SE	NE	27	2	S	98	W	S	IM*		2	36160		11/17/1998	54377	2581	98CW0259	EXXON MOBIL CORP
EXXON BLK SULPHUR-FAWN C	D	BLACK SULPHUR CK	43		SW	SW	20	2	S	98	W	S	IM*		2	36160	35795	11/17/1998	54377	2582	98CW0259	EXXON MOBIL CORP
EXXON BLK SULPHUR-PIC DI	D	BLACK SULPHUR CK	43		NW	NW	21	2	S	97	W	S	IM*		2	36160		11/17/1998	54377	2583	98CW0259	EXXON MOBIL CORP
EXXON MIDDLE FORK STEWART	D	STEWART GULCH	43		SE	NE	4	4	S	96	W	S	IM*		3	36160		11/17/1998	54377	2584	98CW0259	EXXON MOBIL CORP
EXXON EAST FORK STEWART CRE	D	STEWART GULCH	43		NW	SW	35	3	S	96	W	S	IM*		3	36160	35795	11/17/1998	54377	2585	98CW0259	EXXON MOBIL CORP
EXXON LOWER DRY FORK DIVERS	D	TRIBUTARIES-PICEANCE CK	43		SE	SW	31	1	N	96	W	S	IC*		3	36160	35795	11/17/1998	54377	2587	98CW0259	EXXON MOBIL CORP
EXXON YELLOW CREEK DIVERSIO	D	YELLOW CK	43		SW	NW	11	1	S	98	W	S	IC*		3	36160	35795	11/17/1998	54377	2588	98CW0259	EXXON MOBIL CORP
EXXON UPPER PICEANCE CREEK	D	PICEANCE CK	43		NW	NE	1	4	S	95	W	S	IM*		4	36160		11/17/1998	54377	2572	98CW0259	EXXON MOBIL CORP
EXXON PICEANCE CREEK DIV	D	PICEANCE CK	43		SE	SE	9	2	S	97	W	S	IM*		4	36160		11/17/1998	54377	2573	98CW0259	EXXON MOBIL CORP
EXXON LOWER PICEANCE DIV	D	PICEANCE CK	43		SW	NE	15	1	S	97	W	S	IM*		4	36160		11/17/1998	54377	2574	98CW0259	EXXON MOBIL CORP
TWELVEMILE LITTLE D	D	TWELVEMILE CK	43		NE	SW	32	2	S	94	W	S	IF*		0.21	36160	35795	12/6/1998	54396	2545	98CW0139	RED NAPE TERCEL LLC
THIRTEENMILE LITTLE D	D	THIRTEEN MILE CK	43		NE	SW	32	2	S	94	W	S	IF*		0.32	36160	35795	12/6/1998	54396	2546	98CW0139	RED NAPE TERCEL LLC
TWELVE THIRTEEN LITTLE D	D	THIRTEEN MILE CK	43		NE	SW	32	2	S	94	W	S	IF*		0.58	36160	35795	12/6/1998	54396	2547	98CW0139	RED NAPE TERCEL LLC
MOBLEY DIVERSION POINT	D	TRIBUTARIES	43		NE	NE	9	1	S	93	W	S	IDS		0.066	36525	36160	8/24/1997	54421.53927	2248	99CW0133	COX, KARL R
BARBOUR NORTH SIDE D	D	MARVINE CK	43		NE	SE	26	1	N	90	W	S	I		0.3	36525	36160	2/25/1998	54421.54112	526	99CW0290	MARVINE RANCH LLC
BROOKS SPRING #1	S	TRIBUTARIES	43		SE	SW	9	1	S	93	W	S	DSW		0.002	36525	36160	8/10/1999	54643	2566	99CW0183	Unknown
BROOKS SPRING #2	S	TRIBUTARIES	43		SE	SW	9	1	S	93	W	S	DSW		0.007	36525	36160	8/10/1999	54643	2567	99CW0183	Unknown
WILLOW SPRINGS	D	PICEANCE CK	43		NW	NW	25	3	S	94	W	S			0.033	36525	36160	11/16/1999	54741	2565	99CW0325	GOFF, JAMES
JANUS SPRING WELL	W	PICEANCE CK	43		NW	SW	25	3	S	94	W	S	FD		0.033	36525	36160	11/16/1999	54741	5090	99CW0325	GOFF, JAMES
ENTERPRISE SPRINGS	S	PICEANCE CK	43		SW	SW	20	3	S	93	W	S	IF*		0.22	36525	36160	11/16/1999	54741	2561	99CW0325	GOFF, JAMES
BAILEY SPRING	S	PICEANCE CK	43		NE	NE	19	3	S	93	W	S	IF*		0.33	36525	36160	11/16/1999	54741	2560	99CW0325	GOFF, JAMES
ROGER'S DITCH	D	PICEANCE CK	43		SW	SW	24	3	S	94	W	S			1	36525	36160	11/16/1999	54741	2562	99CW0325	GOFF, JAMES
WILCOXSON DITCH NO. 1 HG.2	D	PICEANCE CK	43		SW	SW	19	3	S	93	W	S			1.5	36525	36160	11/16/1999	54741	2564	99CW0325	Unknown
CARNER SPRING NO. 1	S	HAY GULCH	43		SW	SE	36	1	N	96	W	S	IF*		0.033	36891	36525	8/11/2000	55010	2569	00CW0142	Unknown
CARNER SPRING NO. 2	S	HAY GULCH	43		NE	SE	36	1	N	96	W	S	IF*		0.033	36891	36525	8/11/2000	55010	2570	00CW0142	Unknown
REBECCA SPRING	S	TWELVEMILE CK	43		NW	SE	32	2	S	94	W	S	SW		0.011	36891	36525	8/29/2000	55028	2690	00CW0173	RICH AND REBECCA COULTER
RIAH SPRING	S	TWELVEMILE CK	43		NW	SE	32	2	S	94	W	S	SW		0.011	36891	36525	8/29/2000	55028	2691	00CW0173	RICH AND REBECCA COULTER
RICH SPRING	S	TWELVEMILE CK	43		NW	SE	32	2	S	94	W	S	SW		0.011	36891	36525	8/29/2000	55028	2692	00CW0173	RICH AND REBECCA COULTER
RYAN'S POND FEEDER DITCH	D	PICEANCE CK	43		NW	SW	25	3	S	94	W	S			1	36525	36160	3/22/2001	55233	2563	99CW0325	GOFF, JAMES
V AND D SPRING	S	EVANS GULCH	43		SE	NE	7	1	S	93	W	S	IDS	0.033	0.467	37256	36891	6/18/2001	55321	2644	01CW0225	WATSON, DIANE
DESERADO MINE WATER SYS AP	W	SCULLION GULCH	43		NE	SE	1	2	N	101	W	S	NF		0.5	37621	37256	5/31/2002	55668	5108	02CW0361	BLUE MT ENERGY
OLD AGENCY DITCH	D	WHITE RIVER	43		SE	SW	3	1	S	93	W	S	r		1	37621	37256	6/1/2002	55669	849	02CW0145	COLLINS, JOE
NIELSEN SUBDIVISION PUMP	P	TRIBUTARIES	43		NE	NW	4	1	S	93	W	S	I	0.06	0.94	38717	38352	3/31/2005	56703	3033	05CW0026	NIELSEN, ALAN & CYNTHIA

Notes:
Highlighted rows indicate conditional water right may be used for energy development water demand
Data Sources Include - Colorado Decisions Support System (CDSS) Database, Hydrobase Colorado Division of Water Resources (DWR), and personal discussion with water commissioner

District 43
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
EVACUATION CR LAKE RES	R	WEST EVACUATION CK	43		SE	SE	17	5	S	103	W	S	IDS	30	204.45	5219	4998	8/15/1913	23259.23237	3717	4	HILL, JON
STILLWATER RESERVOIR	R	SOUTH FORK	43		NW	SE	36	1	S	91	W	S	IM*		12548	21515	17418	5/29/1955	38499	4303	577	EXXON MOBIL
RIPPLE CREEK RESERVOIR	R	NORTH FORK	43		NE	NW	19	1	N	88	W	S	IM*		27992	24432	21515	11/9/1953	39776.37933	4296	652	YELLOW JACKET DIST
LOST PARK RESERVOIR	R	LOST CK	43		NW	SW	35	2	N	90	W	S	IM*		33541	11/21/66	11/26/58	11/9/1953	39776.37933	3648	652	YELLOW JACKET DIST
BOIES RESERVOIR	R	BLACK SULPHUR CK	43		NE	SW	20	2	S	97	W	S	IM*		31021	11/21/66	11/26/58	7/10/1961	40733	3902	691A	MOBIL OIL CORP
RIO BLANCO RESERVOIR	R	SOUTH FORK	43		NW	SW	25	2	S	89	W	S	X		131035	11/21/66	11/26/58	10/31/1961	40846	4295	705	CRWCD
WOLF CK RES(CRWCD)	R	WHITE RIVER	43		SW	SW	27	3	N	99	W	S	X		49256	11/21/66	11/26/58	7/3/1962	41091	4313	720	CRWCD
MARTIN VILLA RESERVOIR	R	STRAWBERRY CK	43		NE	NE	19	2	N	94	W	S	IN*		466.4	11/21/66	11/26/58	8/6/1963	41490	3650	731	Unknown
RYAN GULCH RESERVOIR	R	PICEANCE CK	43		SW	SE	21	1	S	97	W	S	MC*		22635	11/21/66	11/26/58	12/15/1963	41621	4298	736	EXXON CORP
JUMPS CABIN RES	R	WEST HUNTER CK	43		NW	SE	15	4	S	98	W	S	X		7868.8	11/10/66	09/05/52	5/27/1964	41785	4434	346	HUMBLE OIL COMPANY
HOWELLS CABIN RES	R	WILLOW CK of PICEANCE CK	43		NE	NW	33	4	S	97	W	S	X		8096	11/10/66	09/05/52	5/27/1964	41785	4435	346	Unknown
DIETZ CABIN RES	R	WILLOW CK of PICEANCE CK	43		SE	NW	17	4	S	97	W	S	X		29900	11/10/66	09/05/52	5/27/1964	41785	4727	346	JOHNSON, PAT
FOURTEEN MILE RES 1	R	FOURTEEN MILE CK	43		NE	SE	6	3	S	94	W	S	IM*		85988	11/21/66	11/26/58	6/24/1964	41813	4263	741	Unknown
SOUTH FORK RESERVOIR	R	SOUTH FORK	43		NE	SW	28	2	S	90	W	S	IM*		85342	11/21/66	11/26/58	9/14/1964	41895	4302	746	YZ RANCH, LLC
SUPERIOR OIL TERM RES	R	WHITE RIVER	43		NW	NW	2	1	N	97	W	S	X		800	12/31/69	06/06/69	5/14/1968	43621.43233	4306	W0015-69	SUPERIOR OIL CO
KELLOG GULCH RES	R	KELLOG GULCH	43		SE	NW	9	1	N	96	W	S	X		3700	12/31/69	06/06/69	9/1/1968	43621.43343	4274	W0015-69	SUPERIOR OIL CO
CROOKED WASH RES	R	CROOKED WASH	43		SW	SE	35	3	N	98	W	S	X		11800	12/31/69	06/06/69	9/1/1968	43621.43343	4248	W0015-69	SUPERIOR OIL CO
WRAY GULCH RES	R	WRAY GULCH	43		SW	NW	36	2	N	97	W	S	X		13500	12/31/69	06/06/69	9/1/1968	43621.43343	4316	W0015-69	SUPERIOR OIL CO
BLACKS GULCH RES	R	BLACKS GULCH	43		SW	SE	1	2	N	96	W	S	X		13900	12/31/69	06/06/69	9/1/1968	43621.43343	4244	W0015-69	SUPERIOR OIL CO
POWELL PARK RES	R	WHITE RIVER	43		NW	NE	36	1	N	96	W	S	IM*		75970	12/31/70	12/31/69	8/5/1966	43829.42585	4288	W0226	WLSON, WALTER & CAMERON, THOMA
RALEY RESERVOIR	R	COAL CK	43		NE	NW	28	1	N	93	W	S	IN*		23649	12/31/70	12/31/69	4/3/1970	43922	4292	W0187-70	RALEY, ROBERT
HENRY RES	R	COAL CK	43		SW	SW	30	2	N	92	W	S	IN*		37116	12/31/70	12/31/69	4/3/1970	43922	4269	W0186-70	RALEY, ROBERT
WOLF RIDGE RES	R	TRIBUTARIES	43		SE	SE	12	1	S	98	W	S	IM*		7380	12/31/71	12/31/70	11/19/1966	44194.42691	4314	W0358	EHS MANAGER, NATURAL SODA INC
STORY GULCH RES	R	STORY GULCH	43		SE	NE	6	4	S	95	W	S	IM*		10200	12/31/71	12/31/70	2/28/1967	44194.42792	4304	W0277-71	TOSCO CORPORATION
HUNTER CK RES	R	HUNTER CK	43		SW	NE	27	2	S	97	W	S	IN*		24362	12/31/71	12/31/70	2/28/1967	44194.42792	4270	W0276-71	TOSCO CORP
MILLER CK RES	R	MILLER CK	43		NE	NE	1	2	S	93	W	S	IM*		22600	12/31/71	12/31/70	7/18/1968	44194.43298	4282	W0278-71	TOSCO CORPORATION
NINE MILE RANCH RES 1	R	CURTIS CK	43		SW	SE	16	2	N	93	W	S	X		26.41	12/31/71	12/31/70	10/4/1971	44471	4284	W0445-71	Unknown
WOLF CK RES	R	WOLF CK	43		SE	NW	26	3	N	99	W	S	IM*		35000	12/31/72	12/31/71	9/30/1971	44559.44467	3503	W1705-72	PHILLIPS, L E
CATHEDRAL RES NO. 1	R	EAST DOUGLAS CK	43		NW	SE	23	4	S	101	W	S	I		199	12/31/72	12/31/71	10/11/1972	44844	4246	W1743-72	Unknown
STRAWBERRY CREEK RES	R	STRAWBERRY CK	43		SE	NW	32	2	N	94	W	S	IM*		75957	12/31/73	12/31/72	6/16/1972	44925.44727	4305	W2140-73	CRWCD
WRAY GULCH DAM & RES	R	WRAY GULCH	43		NW	NW	36	2	N	97	W	S	IM*		29374	12/31/73	12/31/72	7/19/1972	44925.4476	4315	W2138-73	CRWCD
WOLF CK RES(CRWCD)	R	WHITE RIVER	43		SW	SW	27	3	N	99	W	S	X		31944	12/31/75	12/31/74	7/25/1974	45655.45496	4313	81CW0145	CRWCD
KENNY RESERVOIR NO 1	R	SPRING CK	43		SE	NE	28	1	N	100	W	S	IN*		100	12/31/75	12/31/74	2/20/1975	45706	4275	W2649-75	Unknown
SAWMILL MOUNTAIN RES	R	BIG BEAVER CK	43		NW	NW	31	1	N	91	W	S	IM*		80000	12/31/76	12/31/75	10/7/1976	46301	4301	W3245-76	YELLOW JACKET DIST
MILLER CK RES	R	MILLER CK	43		NE	NE	1	2	S	93	W	S	X		23300	12/31/79	12/31/78	9/30/1976	47116.46294	4282	79CW0352	TOSCO CORPORATION
STORY GULCH RES	R	STORY GULCH	43		SE	NE	6	4	S	95	W	S	IM*		14800	12/31/79	12/31/78	9/7/1979	47366	4304	79CW0354	TOSCO CORPORATION
UPPER WOLF CREEK POND	R	WOLF CK	43		NW	SW	11	5	N	100	W	S	IDS		0.5	12/31/80	12/31/79	8/17/1980	47711	4473	80CW0495	RECTOR, CARL
UPPER WOLF CREEK LOWER P	R	WOLF CK	43		SE	NW	14	5	N	100	W	S	IDS		0.8	12/31/80	12/31/79	8/17/1980	47711	4474	80CW0495	RECTOR, CARL
JOHNSON POND 15	R	TRIBUTARIES-PICEANCE CK	43		SW	NE	18	3	S	95	W	S	IS	3	10	12/31/81	12/31/80	12/31/1890	47847.14975	4446	81CW0443	Unknown
JOHNSON POND 4	R	TRIBUTARIES-PICEANCE CK	43		SE	SW	21	4	S	95	W	S	S	1	1.5	12/31/81	12/31/80	12/31/1920	47847.25932	4459	81CW0444	Unknown
JOHNSON POND 17	R	TRIBUTARIES-PICEANCE CK	43		NE	NW	29	3	S	95	W	S	IS	0.1	0.1	12/31/81	12/31/80	12/31/1940	47847.33237	4448	81CW0443	Unknown
TAYLOR RES	R	HUNTER CK	43		SE	SE	8	3	S	97	W	S	IM*		89	12/31/81	12/31/80	5/27/1966	47847.42515	4504	81CW0404	MCMURRY OIL LLC
P L RES NO 1	R	WILLOW CK of PICEANCE CK	43		NE	SW	2	3	S	97	W	S	IM*		133.3	12/31/81	12/31/80	5/27/1966	47847.42515	4503	81CW0403	Unknown
BLUE MOUNTAIN RES	R	WOLF CK	43		NW	NW	24	5	N	102	W	S	IM*		465	12/31/81	12/31/80	4/13/1981	47950	4497	81CW0434	THREE SPRINGS RANCH
JUDY BEARD RES	R	WOLF CK	43		NW	NE	21	5	N	101	W	S	IM*		486	12/31/81	12/31/80	4/13/1981	47950	4498	81CW0434	THREE SPRINGS RANCH
JOHNSON POND 5	R	TRIBUTARIES-PICEANCE CK	43		NW	NE	28	4	S	95	W	S	S	0.5	0.5	12/31/81	12/31/80	8/21/1981	48080	4460	81CW0444	Unknown
JOHNSON POND 1	R	TRIBUTARIES-PICEANCE CK	43		SW	NW	21	4	S	95	W	S	S		1	12/31/81	12/31/80	8/21/1981	48080	4456	81CW0444	Unknown
JOHNSON POND 2	R	TRIBUTARIES-PICEANCE CK	43		SW	NW	21	4	S	95	W	S	S		1	12/31/81	12/31/80	8/21/1981	48080	4457	81CW0444	Unknown
JOHNSON POND 3	R	TRIBUTARIES-PICEANCE CK	43		NE	SW	21	4	S	95	W	S	S		1	12/31/81	12/31/80	8/21/1981	48080	4458	81CW0444	Unknown

District 43
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
JOHNSON RES NO 2	R	EAST STEWART GULCH	43		NW	SW	14	4	S	96	W	S	IS	2	98	12/31/81	12/31/80	8/21/1981	48080	4430	81CW0443	Unknown
JOHNSON RES NO 1	R	EAST STEWART GULCH	43		NW	NW	14	4	S	96	W	S	IS	2	98	12/31/81	12/31/80	8/21/1981	48080	4431	81CW0443	Unknown
JOHNSON POND 7	R	TRIBUTARIES-PICEANCE CK	43		NE	SE	11	3	S	96	W	S	IS		1	12/31/81	12/31/80	12/31/1981	48212	4438	81CW0443	Unknown
JOHNSON POND 8	R	TRIBUTARIES-PICEANCE CK	43		NE	SE	11	3	S	96	W	S	IS		1	12/31/81	12/31/80	12/31/1981	48212	4439	81CW0443	Unknown
JOHNSON POND 16	R	TRIBUTARIES-PICEANCE CK	43		SE	NW	8	3	S	95	W	S	IS		3	12/31/81	12/31/80	12/31/1981	48212	4447	81CW0443	Unknown
JOHNSON POND 11	R	TRIBUTARIES-PICEANCE CK	43		NW	NE	13	3	S	96	W	S	IS		5	12/31/81	12/31/80	12/31/1981	48212	4442	81CW0443	Unknown
JOHNSON POND 12	R	TRIBUTARIES-PICEANCE CK	43		NE	NE	13	3	S	96	W	S	IS		5	12/31/81	12/31/80	12/31/1981	48212	4443	81CW0443	Unknown
TAYLOR DRAW RES	R	WHITE RIVER	43		SW	SE	27	2	N	101	W	S	IM*	3550	10250	12/31/82	12/31/81	11/20/1980	48212.47806	4433	82CW0022	RIO BLANCO WCD
WOLF CK RES(CRWCD)	R	WHITE RIVER	43		SW	SW	27	3	N	99	W	S	IM*		81200	12/31/82	12/31/81	2/27/1981	48212.47905	4313	82CW0023	CRWCD
COLO WHITE R RES	R	WHITE RIVER	43		NW	NE	28	1	S	92	W	S	X		105000	12/31/82	12/31/81	11/17/1981	48212.48168	3509	82CW0188	YELLOW JACKET DIST
SMITH GULCH RESERVOIR	R	SMITH GULCH	43		SE	NE	30	1	N	93	W	S	IM*		415	12/31/83	12/31/82	8/9/1982	48577.48433	4502	83CW0340	RUSSEL RANCH PARTNERSHIP
LARSON RES	R	TRIBUTARIES-PICEANCE CK	43		SW	NE	33	3	S	94	W	S	IC*		1200	12/31/88	12/31/87	4/5/1988	50499	3647	88CW0420	EHS MANAGER, NATURAL SODA INC
DESERADO MIND POND RP-5	R	RED WASH	43		SW	SW	23	3	N	101	W	S	N	10	11.43	12/31/93	12/31/92	7/1/1993	52412	3692	93CW0219	BLUE MTN ENERGY
BUFFALO HORN POND 1	R	STRAWBERRY CK	43		NW	NW	27	3	N	95	W	S	IC*		5	12/31/96	12/31/95	12/11/1995	53325.53305	3720	96CW0328	Unknown
BUFFALO HORN POND 2	R	STRAWBERRY CK	43		SW	NE	28	3	N	95	W	S	IC*		5	12/31/96	12/31/95	12/1/1996	53661	3721	96CW0328	Unknown
BALL LAKE RESERVOIR	R	MARVINE CK	43		NW	SE	27	1	N	90	W	S	RPA		10	12/31/98	12/31/97	7/25/1998	54262	3904	98CW0307	MARVINE RANCH LLC
WATER SUPPLY POND	R	THIRTEEN MILE CK	43		SE	SW	32	2	S	94	W	S	ID*		0.5	12/31/98	12/31/97	8/12/1998	54280	3726	98CW0139	RED NAPE TERCEL LLC
WATER SUPPLY PLANT & PL	R	THIRTEEN MILE CK	43		SE	SW	32	2	S	94	W	S	ID*		2.5	12/31/98	12/31/97	8/12/1998	54280	3727	98CW0139	RED NAPE TERCEL LLC
BEAR POND	R	FLAG CK	43		NW	SW	25	2	S	94	W	S	IP*		10	12/31/98	12/31/97	9/30/1998	54329	3749	98CW0309	RITCHIE, JAMES
COUGAR POND	R	EAST FLAG CK	43		SW	NE	26	2	S	94	W	S	IP*		12	12/31/98	12/31/97	9/30/1998	54329	3746	98CW0309	RITCHIE, JAMES
SLED DOG POND	R	FLAG CK	43		NW	NE	11	2	S	94	W	S	PSW		15	12/31/98	12/31/97	9/30/1998	54329	3745	98CW0309	RITCHIE, JAMES
GROUNDHOG POND 2	R	FLAG CK	43		NE	SE	3	2	S	94	W	S	IP*		20	12/31/98	12/31/97	9/30/1998	54329	3742	98CW0309	Unknown
DEER POND	R	FLAG CK	43		SW	NE	26	2	S	94	W	S	IP*		23	12/31/98	12/31/97	9/30/1998	54329	3747	98CW0309	RITCHIE, JAMES
JB POND 1	R	FLAG CK	43		SE	NE	3	2	S	94	W	S	IP*		25	12/31/98	12/31/97	9/30/1998	54329	3740	98CW0309	Unknown
SAMMY POND	R	FLAG CK	43		NE	NE	3	2	S	94	W	S	IP*		25	12/31/98	12/31/97	9/30/1998	54329	3743	98CW0309	RITCHIE, JAMES
GROUNDHOG POND 1	R	FLAG CK	43		NE	SE	3	2	S	94	W	S	IP*		30	12/31/98	12/31/97	9/30/1998	54329	3741	98CW0309	Unknown
BADGER POND	R	FLAG CK	43		NE	NE	10	2	S	94	W	S	IP*		30	12/31/98	12/31/97	9/30/1998	54329	3744	98CW0309	RITCHIE, JAMES
ELK POND	R	FLAG CK	43		SW	NE	26	2	S	94	W	S	IP*		30	12/31/98	12/31/97	9/30/1998	54329	3748	98CW0309	RITCHIE, JAMES
STRAWBERRY L&C POND 5	R	STRAWBERRY CK	43		NW	SE	15	3	N	95	W	S	IP*		16.5	12/31/98	12/31/97	11/3/1998	54363	3734	98CW0273	Unknown
EXXON DRY CREEK RESERVOIR	R	TRIBUTARIES-PICEANCE CK	43		SW	SW	4	2	S	95	W	S	IC*		20	12/31/98	12/31/97	12/14/1998	54404	3778	98CW0259	EXXON MOBIL CORPORATION
EXXON LOVE RANCH RESERVOIR	R	PICEANCE CK	43		SE	NW	9	2	S	97	W	S	IC*		30	12/31/98	12/31/97	12/14/1998	54404	3772	98CW0259	EXXON MOBIL CORPORATION
EXXON HUNTER CREEK RESERVOI	R	HUNTER CK	43		NW	SE	30	3	S	97	W	S	IC*		30	12/31/98	12/31/97	12/14/1998	54404	3775	98CW0259	EXXON MOBIL CORPORATION
EXXON WILLOW CREEK RESERVOI	R	WILLOW CK of PICEANCE CK	43		NE	NW	34	3	S	97	W	S	IC*		30	12/31/98	12/31/97	12/14/1998	54404	3776	98CW0259	EXXON MOBIL CORPORATION
EXXON YELLOW CREEK RESERVOI	R	YELLOW CK	43		NE	NW	11	1	S	98	W	S	IC*		30	12/31/98	12/31/97	12/14/1998	54404	3777	98CW0259	EXXON MOBIL CORPORATION
EXXON BOIES BLACK SULPUR RE	R	BLACK SULPHUR CK	43		NW	SE	20	2	S	97	W	S	IC*		50	12/31/98	12/31/97	12/14/1998	54404	3773	98CW0259	EXXON MOBIL CORPORATION
EXXON B&M RESERVOIR	R	PICEANCE CK	43		NE	SW	26	2	S	97	W	S	IC*		50	12/31/98	12/31/97	12/14/1998	54404	3774	98CW0259	EXXON MOBIL CORPORATION
GRAYLEN'S POND	R	PICEANCE CK	43		NW	NW	30	3	S	93	W	S	RP*		1	12/31/99	12/31/98	11/16/1999	54741	3760	99CW0325	GOFF, JAMES
CHASE'S POND	R	PICEANCE CK	43		SE	SE	24	3	S	93	W	S	RP*		1.2	12/31/99	12/31/98	11/16/1999	54741	3756	99CW0325	GOFF, JAMES
DIANE'S POND	R	PICEANCE CK	43		NE	SE	24	3	S	94	W	S	RP*		1.2	12/31/99	12/31/98	11/16/1999	54741	3759	99CW0325	GOFF, JAMES
BRUCE'S POND	R	PICEANCE CK	43		SE	SW	19	3	S	93	W	S	RP*		1.5	12/31/99	12/31/98	11/16/1999	54741	3755	99CW0325	GOFF, JAMES
COOKIE'S POND	R	PICEANCE CK	43		NE	NE	25	3	S	93	W	S	RP*		1.5	12/31/99	12/31/98	11/16/1999	54741	3757	99CW0325	GOFF, JAMES
MOMO'S POND	R	PICEANCE CK	43		NW	SW	19	3	S	93	W	S	RP*		1.5	12/31/99	12/31/98	11/16/1999	54741	3763	99CW0325	GOFF, JAMES
TODD AND TRACY'S POND	R	PICEANCE CK	43		NW	SW	19	3	S	93	W	S	RP*		1.5	12/31/99	12/31/98	11/16/1999	54741	3770	99CW0325	GOFF, JAMES
BUBBA'S POND	R	PICEANCE CK	43		SE	NW	19	3	S	93	W	S	RP*		2.5	12/31/99	12/31/98	11/16/1999	54741	3754	99CW0325	GOFF, JAMES
RUDY'S POND	R	PICEANCE CK	43		SE	SE	24	3	S	94	W	S	RP*		2.5	12/31/99	12/31/98	11/16/1999	54741	3766	99CW0325	GOFF, JAMES
DADDY O'S POND	R	PICEANCE CK	43		SE	SW	19	3	S	93	W	S	RP*		3.5	12/31/99	12/31/98	11/16/1999	54741	3758	99CW0325	GOFF, JAMES
JODY'S POND	R	PICEANCE CK	43		NW	NW	30	3	S	93	W	S	RP*		4	12/31/99	12/31/98	11/16/1999	54741	3761	99CW0325	GOFF, JAMES
TAYLOR'S POND	R	PICEANCE CK	43		NE	NE	25	3	S	94	W	S	RP*		4	12/31/99	12/31/98	11/16/1999	54741	3768	99CW0325	GOFF, JAMES
ROGER'S POND	R	PICEANCE CK	43		NW	NW	25	3	S	94	W	S	RP*		5	12/31/99	12/31/98	11/16/1999	54741	3764	99CW0325	GOFF, JAMES

District 43
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
MARTIN POND	R	NORTH FORK	43		NW	NW	36	1	N	91	W	S	IP*		0.01	12/31/00	12/31/99	8/11/2000	55010	3779	00CW0279	MARTIN, MINETTA E
TURGOOSE POND	R	PICEANCE CK	43		NW	SW	25	3	S	94	W	S	RS*		1.75	12/31/99	12/31/98	3/22/2001	55233	3771	99CW0325	GOFF, JAMES
RYAN'S POND	R	PICEANCE CK	43		SW	SW	25	3	S	94	W	S	RS*		3.5	12/31/99	12/31/98	3/22/2001	55233	3767	99CW0325	GOFF, JAMES
JODY'S POND NO. 2	R	PICEANCE CK	43		SW	NE	19	3	S	93	W	S	RP*		3	12/31/99	12/31/98	4/18/2001	55260	3762	99CW0325	Unknown
ROGER TROUT POND	R	PICEANCE CK	43		NW	SW	19	3	S	94	W	S	RP*		5	12/31/99	12/31/98	5/31/2001	55303	3765	99CW0325	GOFF, JAMES
SEELY RESERVOIR	R	WHITE RIVER	43		NE	SW	3	1	S	93	W	S	RPW		3.425	12/31/02	12/31/01	6/1/2002	55669	5107	02CW0145	SEELY, JERRY & MARY ANN
DEAN'S RESERVOIR	R	COTTONWOOD CK	43		NE	SE	23	1	N	92	W	S	IR*		8	12/31/02	12/31/01	9/12/2002	55772	3787	02CW0386	PARR, DEAN & ARTIE

Notes:
Highlighted rows indicate conditional water right may be used for energy development water demand
Data Sources Include - Colorado Decisions Support System (CDSS) Database, Hydrobase Colorado Division of Water Resources (DWR), and personal discussion with water commissioner

District 45
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
MOORE DITCH	D	GARFIELD CREEK	45	NW	SW	SE	4	6	S	91	W	S	IA	1.08	0.25	5/5/1888		6/1/1883	12205	695	14	GENE R HILTON ETAL
EAST DIVIDE CREEK DITCH	D	EAST DIVIDE CREEK	45	NE	SW	SW	18	7	S	91	W	S	I	4.58	1.42	5/5/1888		5/15/1885	12919	584	31	DICK MORGAN
TALLMADGE AND GIBSON D	D	EAST DIVIDE CREEK	45	NE	SW	NE	12	7	S	92	W	S	I	5	1.2	5/5/1888		8/14/1885	13010	790	36	FRANK DALEY
TEPEE DITCH	D	WEST MAMM CREEK	45	SE	SE	SW	13	7	S	93	W	S	I	0.5	1.08	5/5/1888		3/14/1886	13222	797	45	WALTER S ROLES
OBRIEN FEEDER DITCH	D	COTTONWOOD CREEK	45	SE	NE	NE	24	7	S	95	W	S	I	0.42	2.58	5/5/1888		3/15/1886	13223	712	46	JAMES R AND JUDY H LEMON
SPRING CREEK DITCH	D	COTTONWOOD CREEK	45	NW	NE	SE	34	7	S	96	W	S	I		2	5/5/1888		5/14/1886	13283	772	52	EDWARD J HOAGLUND
SMITH DITCH	D	BEAVER CREEK	45	SW	SE	SW	24	6	S	94	W	S	I	0.09	0.75	5/5/1888		11/20/1886	13473	766	63	NORMAN MEAD
H AND S DITCH	D	CACHE CREEK	45	SW	SW	SE	32	6	S	94	W	S	I	3.54	0.13	5/5/1888		3/10/1887	13583	616	CA3357	JOAN L SAVAGE
MUSCONETCONG DITCH	D	BATTLEMENT CREEK	45	NW	SW	NE	15	7	S	95	W	S	I	2.07	0.35	5/5/1888		3/20/1887	13593	706	71	NOEL RICHARDSON
TALLMADGE AND GIBSON D	D	EAST DIVIDE CREEK	45	NE	SW	NE	12	7	S	92	W	S	I		1.67	5/5/1888		7/9/1887	13704	790	82	FRANK DALEY
OBRIEN AND BAUMGARTNER D	D	CACHE CREEK	45	NW	SE	SW	17	7	S	94	W	S	I	2.83	1.17	5/5/1888		7/31/1887	13726	711	87	BROWN AND ASSOCIATS
GOODENOUGH DITCH	D	BEAVER CREEK	45	NE	NE	NW	26	6	S	94	W	S	I		0.3	5/5/1888		9/27/1887	13784	608	92	GEORGE PEARSON
BEAVER CREEK DITCH	D	BEAVER CREEK	45	NE	NE	NW	26	6	S	94	W	S	I		0.42	5/5/1888		9/29/1887	13786	518	94	GEORGE PEARSON
WARD AND REYNOLDS DITCH	D	DIVIDE CREEK	45	SE	NW	SE	13	6	S	92	W	S	I	2.05	0.87	5/5/1888		2/13/1888	13923	810	104	FRED FREI ETAL
MUSCONETCONG DITCH	D	BATTLEMENT CREEK	45	NW	SW	NE	15	7	S	95	W	S	I	1.4	1.27	5/5/1888		3/7/1888	13946	706	108	NOEL RICHARDSON
ENTERPRISE DITCH	D	WEST MAMM CREEK	45	NE	SW	SE	14	7	S	93	W	S	IA	3.5	27.57	4/8/1893	11/28/1891	7/1/1891	15307.15157	593	111	HAROLD SHAEFFER
ELMINA DEWITT DITCH	D	BATTLEMENT CREEK	45	NW	SW	NE	15	7	S	95	W	S	I		1.3	12/17/1902	11/10/1902	4/8/1894	19306.16169	591	117A	RON DODD
DILLMAN SPRING DITCH	D	SPRING CANYON	45	SW	SE	NW	22	7	S	94	W	S	I		1.1	03/23/04	03/12/04	7/6/1894	19794.16258	568	117CC	CARL BERNKLAU
PENNY IRR DITCH NO 2	D	DIVIDE CREEK	45	NW	NE	SW	36	6	S	92	W	S	I		0.4	11/15/04	05/31/04	2/26/1895	19874.16493	720	117D	Duane Scott
F F PARK DITCH	D	ALKALI CR (W DIVIDE)	45	NE	NE	NE	15	8	S	92	W	S	I		2.8	11/13/1905	10/14/1905	5/3/1903	20375.1948	596	CA1421	NEVER BUILT
SPENCER DITCH	D	SPRING GULCH	45	SW	SE	NW	19	7	S	95	W	S	I		0.54	4/29/1907	12/13/1906	4/23/1900	20800.18375	770	119DD	BTLMNT MESA METRO D
J S PORTER DITCH	D	ALKALI CR (W DIVIDE)	45	NE	NW	NE	2	8	S	92	W	S	I	1.6	0.8	1/7/1908	12/14/1907	1/22/1907	21166.2084	642	CA1263	ROBERT PATTERSON
BLUE BIRD DITCH	D	CACHE CREEK	45	SW	SE	NW	8	7	S	94	W	S	I	4.06	1.24	12/3/1908	11/25/1908	5/19/1896	21513.16941	526	118BB	JOAN L SAVAGE
OTTEN DITCH NO 1	D	EAST DIVIDE CREEK	45	NE	NE	SE	24	7	S	91	W	S	ID	1.32	1.08	07/19/10	04/29/10	4/1/1910	22033.22005	940	144	Abandoned
KERLEE DITCH	D	MONUMENT GULCH	45	SE	SE	SW	16	7	S	95	W	S	I	0.9	0.6	08/26/10	07/23/10	3/23/1901	22118.18709	659	122AAA	MARL MARTIN ETAL
WANDERING JEW DITCH	D	DRY CREEK (WEST)	45	SW	SE	SE	28	7	S	95	W	S	I	3.94	0.56	08/27/10	08/26/10	11/3/1909	22152.21856	808	143A	ROLLIE GARDNER ETAL
DWIRE SPRING NO 1 DITCH	S	BALDY CREEK	45	SE	NE	NW	36	6	S	91	W	S	IM*	0.1	0.14	11/14/10	08/27/10	6/16/1906	22153.2062	575	138A	Colorado DOW
DWIRE SPRING NO 2 DITCH	S	BALDY CREEK	45	SE	NE	NW	36	6	S	91	W	S	IA	0.02	0.2	11/14/10	08/27/10	6/16/1906	22153.2062	1105	138A	Colorado DOW
MULTA-TRINA DITCH	D	WEST DIVIDE CREEK	45	SE	NE	SE	11	7	S	92	W	S	IA	24.66	24.34	11/26/20	07/10/20	9/1/1906	25758.20697	704	152	JOHN JULIAS
JAY BIRD DITCH	D	CACHE CREEK	45	NW	NW	SW	32	6	S	94	W	S	I	1.98	1.03	06/22/39	08/08/32	4/3/1912	30170.22738	645	167	EDWARD J HOAGLUND
J T PEARCE DITCH	D	COLORADO RIVER	45	NW	SE	SE	17	6	S	93	W	S	MND		20	07/21/59	03/27/44	2/17/1947	35476	643	787	City of Grand Junction
MCPHERSON DITCH	D	DRY HOLLOW CREEK	45	NW	NW	SW	15	6	S	92	W	S	I		5	03/02/53	05/07/45	10/24/1951	37186	680	210	VALLEY FARMS INC
EATON PIPELINE NO 2	L	COLORADO RIVER	45	NW	NE	NW	18	7	S	95	W	S	IND	4.25	5.75	07/09/65	03/02/53	12/18/1956	39068	582	256	Battlement Mesa Metro District
W DIVIDE PROJ W DIV CNL	D	BALDY CREEK	45				36	6	S	91	W	S	IM*		50	07/09/65	03/02/53	4/22/1957	39193	817	257B	West Divide Water Conservancy District
W DIVIDE PROJ W DIV CNL	D	GARFIELD CREEK	45				33	6	S	90	W	S	IM*		50	07/09/65	03/02/53	4/22/1957	39193	1089	257B	West Divide Water Conservancy District
W DIVIDE PROJ HORSETHIEF	D	WEST DIVIDE CREEK	45	SE	NE	SW	7	8	S	91	W	S	IM*		550	07/09/65	03/02/53	4/22/1957	39193	1093	257C	West Divide Water Conservancy District
W DIVIDE PROJ W DIV CNL	D	EAST DIVIDE CREEK	45			NE	22	7	S	91	W	S	IM*		200	07/09/65	03/02/53	4/22/1957	39193	1096	257B	West Divide Water Conservancy District
BATTLEMENT MESA PP PL D	D	COLORADO RIVER	45	SW	NW	SE	5	7	S	95	W	S	IC*	1.78	18.22	07/09/65	03/02/53	9/16/1961	40801	515	272	BATLMNT MESA PARTNSHP & EXXON
ROAN PLATEAU PUMPING PL	P	COLORADO RIVER	45	NW	NE	NW	4	7	S	95	W	S	IM*		100	07/09/65	03/02/53	5/27/1964	41785	745	274	HUMBLE OIL CO
MINEOTA DITCH	D	DIVIDE CREEK	45	SE	NE	SE	24	6	S	92	W	S	ID*		5	07/09/65	03/02/53	6/10/1964	41799	693	275	VALLEY FARMS INC
LOUIS REYNOLDS DITCH	D	DIVIDE CREEK	45	NW	NE	NE	25	6	S	92	W	S	I		2	12/31/1971	12/31/1970	5/15/1971	44329	675	W0386	BRIT & SHARON MCLIN
DONALD GOLDMAN WW DITCH	D	EAST GULCH (GIBSON)	45	SE	SW	SW	19	6	S	91	W	S	I		5.4	12/31/1971	12/31/1970	6/1/1971	44346	896	W0386	ALBERT FREI & SONS
ANDERSON WELL NO 2	W	COLORADO RIVER	45	NW	NW	NW	20	6	S	93	W	S	IDO	1	3.96	12/31/1972	12/31/1971	8/31/1960	44559.4042	5014	W1310	Town of Rifle
TRAHERN PMP PLANT & PL	P	COLORADO RIVER	45	SE	NE	SW	28	6	S	94	W	S	IDS	3	3	12/31/1972	12/31/1971	12/31/1963	44559.41637	954	W0630	JOAN L SAVAGE
BURNETT DITCH	D	COLORADO RIVER	45	NE	NW	SW	11	6	S	92	W	S	P		15	12/31/1972	12/31/1971	3/1/1970	44559.43889	535	W0545	DALE KEITHLEY
RIVERBEND WELL NO 2	W	COLORADO RIVER	45	NW	NW	SW	35	5	S	90	W	S	IM*		0.67	12/31/1973	12/31/1972	6/1/1973	45077	5063	W2125	Riverbend Water and Sewer District
RIVERBEND WELL NO 1	W	COLORADO RIVER	45	SE	SE	NW	35	5	S	90	W	S	IM*		0.67	12/31/1973	12/31/1972	6/1/1973	45077	5104	W2125	Riverbend Water and Sewer District
RIVERBEND WELL NO 3	W	COLORADO RIVER	45	NE	NW	SW	35	5	S	90	W	S	IM*	0.44	0.23	12/31/1973	12/31/1972	6/1/1973	45077	5105	W2125	Riverbend Water and Sewer District
RIVERBEND WELL NO 4	W	COLORADO RIVER	45	NE	NW	SW	35	5	S	90	W	S	IM*		0.67	12/31/1973	12/31/1972	6/1/1973	45077	5106	W2125	Riverbend Water and Sewer District

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
RIVERBEND WELL NO 5	W	COLORADO RIVER	45	NW	NE	SW	35	5	S	90	W	S	IM*		0.67	12/31/1973	12/31/1972	6/1/1973	45077	5107	W2125	Riverbend Water and Sewer District
HUNTLEY DITCH	D	BATTLEMENT CREEK	45	SE	NE	NW	15	7	S	95	W	S	IM*		15	12/31/1973	12/31/1972	7/24/1973	45130	638	W2012	Battlement Mesa Metro District
ORTON WELL NO 1	W	UNNAMED TRIB(COLO R)	45	SE	SW	NE	10	7	S	95	W	S	D		0.033	12/31/74		9/25/1973	45193	5060	W2237	Otis Orton
MAHAFFEY GATHERING D NO2	S	SPRING (RULISON)	45	SE	NE	SE	35	6	S	95	W	S	I		1	12/31/1973	12/31/1972	10/30/1973	45228	1073	W2175	C W BYERRUM
REEVES WELL NO 1	W	CACHE CREEK	45	SE	NW	SW	20	7	S	94	W	S	IC*		1.33	12/31/1974	12/31/1973	9/18/1973	45290.45186	5113	W2515	JOAN L SAVAGE
SWARTZENDRUBER PMP & PL	P	COLORADO RIVER	45	SE	NE	SE	30	6	S	94	W	S	I	2	1	12/31/1974	12/31/1973	2/11/1974	45332	952	W2301	Paul D McNew
BATTLEMENT MESA WELL 1A	W	COLORADO RIVER	45	SW	SE	NE	13	7	S	96	W	S	IM*		0.22	12/31/1974	12/31/1973	3/1/1974	45350	5123	W2560	Battlement Mesa Metro District
BATTLEMENT MESA WELL 2A	W	COLORADO RIVER	45	SE	SE	NE	13	7	S	96	W	S	IM*		0.22	12/31/1974	12/31/1973	3/1/1974	45350	5124	W2560	Battlement Mesa Metro District
BATTLEMENT MESA WELL 3A	W	COLORADO RIVER	45	SW	SE	NE	13	7	S	96	W	S	IM*		0.22	12/31/1974	12/31/1973	3/1/1974	45350	5125	W2560	Battlement Mesa Metro District
BATTLEMENT MESA WELL 4A	W	COLORADO RIVER	45	SW	SE	NE	13	7	S	96	W	S	IM*		0.22	12/31/1974	12/31/1973	3/1/1974	45350	5126	W2560	Battlement Mesa Metro District
BATTLEMENT MESA WELL 5A	W	COLORADO RIVER	45	SE	SW	NE	13	7	S	96	W	S	IM*		0.22	12/31/1974	12/31/1973	3/1/1974	45350	5127	W2560	Battlement Mesa Metro District
PORTER PUMP & DIVR D	P	COLORADO RIVER	45	SW	SW	NW	12	6	S	92	W	S	I		3	12/31/1975	12/31/1974	4/1/1974	45655.45381	846	960A	FRED FREI
DRY HOLLOW FEEDER CANAL	D	COLORADO RIVER	45	NW	SW	SW	4	6	S	91	W	S	IN*		250	12/31/1978	12/31/1977	6/20/1958	46751.39617	897	W3888	COLO RIVER WATER CONSERV DIST
DEBEQUE WTR WK PL & P ST	P	COLORADO RIVER	45	NW	NE	SW	27	8	S	97	W	S	M		0.75	12/31/1980	12/31/1979	5/25/1952	47481.374	1054	80CW0079	City of DeBeque
KAMM AND DAVIS DITCH	D	EAST GULCH (GIBSON)	45	SE	NE	NW	34	6	S	91	W	S	IS		3	12/31/1980	12/31/1979	5/1/1979	47481.47237	656	80CW0068	DICK JOLLEY
R AND M WELL	W	EAST DIVIDE CREEK	45	SW	NE	NE	22	7	S	91	W	S	D	0.009	0.024	12/31/80		4/1/1980	47573	5068	80CW0100	EDWARD E SMITH
ROBINSON WELL	W	EAST DIVIDE CREEK	45	NE	SE	NW	25	7	S	91	W	S	D		0.033	12/31/80		4/1/1980	47573	5108	80CW0099	C/O COLO NAT BANK
PARKER DITCH NO 1	D	WEST MAMM CREEK	45	NE	NE	NW	5	8	S	93	W	S	IS		1	12/31/1981	12/31/1980	8/31/1980	47847.47725	1078	81CW0078	J M Johnson
PITTS WELL NO 1	W	SPRING CREEK (EAST)	45	NW	NE	NW	11	7	S	95	W	S	IM*		0.078	12/31/1981	12/31/1980	12/16/1981	48197	5162	81CW0506	Carl V Pitts
PITTS WELL NO 2	W	SPRING CREEK (EAST)	45	SW	NE	NW	11	7	S	95	W	S	IM*		0.078	12/31/1981	12/31/1980	12/16/1981	48197	5163	81CW0506	Carl V Pitts
PITTS WELL NO 3	W	SPRING CREEK (EAST)	45	NW	SE	NW	11	7	S	95	W	S	IM*		0.078	12/31/1981	12/31/1980	12/16/1981	48197	5164	81CW0506	Carl V Pitts
PITTS WELL NO 4	W	SPRING CREEK (EAST)	45	SW	SE	NW	11	7	S	95	W	S	IM*		0.078	12/31/1981	12/31/1980	12/16/1981	48197	5165	81CW0506	Carl V Pitts
BATTLEMENT MESA WELL B5	W	COLORADO RIVER	45	NE	SE	SW	7	7	S	95	W	S	IM*		0.668	12/31/1982	12/31/1981	11/11/1981	48212.48162	5258	82CW0107	Battlement Mesa Metro District
BATTLEMENT MESA WELL B6	W	COLORADO RIVER	45	SE	NE	SW	7	7	S	95	W	S	IM*		0.668	12/31/1982	12/31/1981	11/11/1981	48212.48162	5259	82CW0107	Battlement Mesa Metro District
BATTLEMENT MESA WELL B7	W	COLORADO RIVER	45	SW	NW	SE	7	7	S	95	W	S	IM*		0.668	12/31/1982	12/31/1981	11/11/1981	48212.48162	5260	82CW0107	Battlement Mesa Metro District
MATTINGLEY WELL NO 2	W	DRY HOLLOW CREEK	45	NW	SW	NE	34	6	S	92	W	S	IDS		0.033	12/31/1982	12/31/1981	5/18/1982	48350	5156	82CW0138	Doug and Judy Weller
MATTINGLEY WELL NO 4	W	DRY HOLLOW CREEK	45	SE	NW	NE	34	6	S	92	W	S	IDS		0.033	12/31/1982	12/31/1981	5/18/1982	48350	5158	82CW0138	Harold & Deanna Hoffmeister
J & K WELL	W	DRY HOLLOW CREEK	45		SW	NE	34	6	S	92	W	S	IDS		0.033	12/31/1982	12/31/1981	5/18/1982	48350	5398	97CW0238	JERRY & KRIS HOFFMEISTER
TAYLOR DITCH	D	UNNAMED TRIB(COLO R)	45	SE	NW	NW	20	6	S	93	W	S	IS		0.05	12/31/1983	12/31/1982	8/21/1979	48577.47349	1097	83CW0363	RAY DEAN TAYLOR
COAL RIDGE PUMP AND PL	P	COLORADO RIVER	45	SW	NE	SE	35	5	S	90	W	S	IM*		2	12/31/1983	12/31/1982	9/14/1983	48834	1099	83CW0367	CB MINERALS CO, LLC
DEER SPRINGS	S	WEST DIVIDE CREEK	45	NW	NW	SE	3	9	S	91	W	S	PD		0.033	12/31/1983	12/31/1982	9/27/1983	48847	5257	83CW0298	WILLIAM M HUFF
FURR SPRING NO 2	S	MONUMENT GULCH	45	SW	NE	SE	22	7	S	95	W	S	D		0.1	12/31/1984	12/31/1983	5/22/1981	48942.47989	5279	84CW0191	David Furr
FURR SPRING NO 1	S	MONUMENT GULCH	45	NW	SE	SE	22	7	S	95	W	S	I		0.189	12/31/1984	12/31/1983	6/18/1983	48942.48746	5278	84CW0191	David Furr
FURR SPRING NO 3	S	MONUMENT GULCH	45	NW	SE	SE	22	7	S	95	W	S	ID		0.145	12/31/1984	12/31/1983	6/18/1983	48942.48746	5280	84CW0191	David Furr
LETSON CLUSTER SPG SYS	S	EAST DIVIDE CREEK	45	NE	SW	SE	25	7	S	91	W	S	D		0.01	12/31/1984	12/31/1983	9/25/1983	48942.48845	5247	84CW0002	GEORGE W LETSON
BURNS SPRING & PIPELINE	S	WALLACE CREEK	45	NW	NE	NW	34	8	S	95	W	S	IDH		0.4	12/31/1988	12/31/1987	5/21/1988	50545	552	88CW0417	U S FOREST SERVICE
HENRY SPRING NO 1	S	UNNAMED TRIB(COLO R)	45	NW	NW	SW	3	7	S	95	W	S	ID		0.5	12/31/1989	12/31/1988	6/1/1989	50921	5308	04CW0020	Gaylord & Phillis Henry
T RICHARDSON DITCH NO 1	D	SOUTH CANON CREEK	45	SE	NE	SW	23	6	S	90	W	S	IFS		2	12/31/1990	12/31/1989	11/1/1987	51134.50343	1141	90CW0226	Daryl Tye Richardson
D & M DITCH NO 2	D	EAST GULCH (GIBSON)	45	SE	NE	SW	30	6	S	91	W	S	O		0.25	12/31/1990	12/31/1989	12/31/1988	51134.50769	1138	90CW0101	Dan & Mary Rodreick
DEPAOLO NO 1 DITCH & PL	D	DIVIDE CREEK	45	SE	SE	SW	24	6	S	92	W	S	IO		0.8	12/31/1990	12/31/1989	3/2/1990	51195	1140	90CW0075	Carmine Depaolo
LANG WELL NO 1	W	UNNAMED TRIB(COLO R)	45	NW	SE	SE	32	6	S	94	W	S	IFS		0.033	12/31/1990	12/31/1989	10/23/1990	51430	5290	90CW0217	M D Lang-Burchfield
WYNN WELL NO 1	W	DRY CREEK (EAST)	45	SW	NE	NE	14	7	S	93	W	S	I	0.15	0.183	12/31/1991	12/31/1990	7/23/1990	51499.51338	5293	91CW0040	Harold R Shaeffer
WYNN WELL NO 2	W	DRY CREEK (EAST)	45	SE	NE	NE	14	7	S	93	W	S	I		0.333	12/31/1991	12/31/1990	7/23/1990	51499.51338	5294	91CW0040	Harold R Shaeffer
WYNN WELL NO 3	W	DRY CREEK (EAST)	45	NW	NE	NE	14	7	S	93	W	S	I		0.333	12/31/1991	12/31/1990	7/23/1990	51499.51338	5295	91CW0040	Harold R Shaeffer
L AND T PUMP STATION	P	DRY HOLLOW CREEK	45	SE	NE	SW	27	6	S	92	W	S	IDS		2.1	12/31/1993	12/31/1992	7/14/1992	52230.5206	571	93CW0306	THOMAS PLATZER
NORTH STAR WELL	W	COLORADO RIVER	45	SW	SE	SE	5	7	S	95	W	S	IC*		0.4	12/31/1994	12/31/1993	12/31/1993	52595.52595	5392	94CW0375	NORTH STAR FOUNDATN
SADIE DITCH	D	EAST GULCH (GIBSON)	45	SW	SE	SE	35	6	S	91	W	S	IDS	0.3	2	12/31/1994	12/31/1993	12/21/1994	52950	1153	94CW0313	BARRY STOUT
SIERRA BLUFFS WELL NO 1	W	DRY HOLLOW CREEK	45	NW	NW	SE	22	6	S	92	W	S	IDS		0.033	12/31/1995	12/31/1994	6/9/1994	52960.52755	5142	95CW0058	Dennis Cooley
SIERRA PINYON WELL NO 1	W	DRY HOLLOW CREEK	45	SW	NE	NW	22	6	S	92	W	S	IDS		0.033	12/31/1995	12/31/1994	6/9/1994	52960.52755	5143	95CW0057	BARTON PORTER

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
SIERRA PINYON WELL NO 2	W	DRY HOLLOW CREEK	45	SE	NE	NW	22	6	S	92	W	S	IDS		0.066	12/31/1995	12/31/1994	6/9/1994	52960.52755	5144	95CW0057	BARTON PORTER
SIERRA PINYON WELL NO 3	W	DRY HOLLOW CREEK	45	SE	SW	SW	15	6	S	92	W	S	IDS		0.033	12/31/1995	12/31/1994	6/9/1994	52960.52755	5145	95CW0057	BARTON PORTER
ANDERSON POND NO 1 EAST	R	COLORADO RIVER	45	SE	SE	SW	17	6	S	93	W	S	E		0.028	12/31/1995	12/31/1994	8/30/1994	52960.52837	3528	95CW0147	Alleman Nicholas Cambell LLC
MISTY SPRING	S	MAMM CREEK	45	NE	SE	NW	29	6	S	92	W	S	IP*	0.01	0.145	12/31/1995	12/31/1994	3/8/1995	53027	5342	95CW0073	SCOTT W BRYNILDSON
APPLE TREE SPRING	S	MAMM CREEK	45	SE	SW	NW	29	6	S	92	W	S	IP*		0.022	12/31/1995	12/31/1994	3/8/1995	53027	5343	95CW0073	SCOTT W BRYNILDSON
ERIC SPRING	S	MAMM CREEK	45	NE	NE	NW	29	6	S	92	W	S	IP*		0.022	12/31/1995	12/31/1994	3/8/1995	53027	5344	95CW0073	SCOTT W BRYNILDSON
LINDA SPRING	S	MAMM CREEK	45	NE	NE	NW	29	6	S	92	W	S	IP*		0.044	12/31/1995	12/31/1994	3/8/1995	53027	5345	95CW0073	SCOTT W BRYNILDSON
SCOTT SPRING	S	MAMM CREEK	45	NW	SW	NW	29	6	S	92	W	S	IP*	0.01	0.012	12/31/1995	12/31/1994	3/8/1995	53027	5346	95CW0073	SCOTT W BRYNILDSON
BRYNILDSON SPRING	S	MAMM CREEK	45	SE	SW	SE	19	6	S	92	W	S	IP*	0.01	0.012	12/31/1995	12/31/1994	3/8/1995	53027	5347	95CW0073	SCOTT W BRYNILDSON
SIERRA PINYON DITCH P&PL	DLP	DRY HOLLOW CREEK	45	SW	NE	NW	22	6	S	92	W	S	IP*		1	12/31/1995	12/31/1994	3/23/1995	53042	1154	95CW0057	BARTON PORTER
MINEOTA DITCH	D	DIVIDE CREEK	45	SE	NE	SE	24	6	S	92	W	S	IM*		2.71	12/31/1995	12/31/1994	8/28/1995	53200	693	95CW0327	VALLEY FARMS INC
VALLEY FARMS PUMP & PL	P	COLORADO RIVER	45	NE	NE	SW	12	6	S	92	W	S	IM*		2.71	12/31/1995	12/31/1994	8/28/1995	53200	848	95CW0327	VALLEY FARMS INC
RISING SUN PUMP	P	COLORADO RIVER	45	SW	NW	SW	11	6	S	92	W	S	IM*		2.71	12/31/1995	12/31/1994	8/28/1995	53200	853	95CW0327	Stillwater
RISING SUN P&PL SW ENLG	P	COLORADO RIVER	45	SW	NW	SW	11	6	S	92	W	S	IM*		2.71	12/31/1995	12/31/1994	8/28/1995	53200	1167	95CW0327	Grant Brothers
STILLWATER WELLFIELD NO1	W	COLORADO RIVER	45		NW	SW	10	6	S	92	W	S	IM*		2.71	12/31/1995	12/31/1994	8/28/1995	53200	5412	95CW0328	CSCCN LLC
STILLWATER WELLFIELD NO2	W	COLORADO RIVER	45		SE	SE	10	6	S	92	W	S	IM*		2.71	12/31/1995	12/31/1994	8/28/1995	53200	5413	95CW0328	CSCCN LLC
STILLWATER R WELLFIELD 1	W	COLORADO RIVER	45	SW	NW	SW	10	6	S	92	W	S	IM*		2.71	12/31/1995	12/31/1994	8/28/1995	53200	5443	95CW0328	CSCCN LLC
STILLWATER R WELLFIELD 2	W	COLORADO RIVER	45	SW	SW	SW	11	6	S	92	W	S	IM*		2.71	12/31/1995	12/31/1994	8/28/1995	53200	5444	95CW0328	CSCCN LLC
EVANS DITCH	D	BATTLEMENT CREEK	45	SW	NW	NW	10	7	S	95	W	S	IP*		2	12/31/1996	12/31/1985	9/21/1995	53224	1159	95CW0344	JACK T EVANS
MCPHERSON CORRAL SPR D	S	DIVIDE CREEK	45	SW	SW	SW	12	6	S	92	W	S	ID		0.056	12/31/1995	12/31/1994	10/31/1995	53264	1170	95CW0363	ROY & SANDY MCPHERSON
NELSON SPRING	S	COLORADO RIVER	45	SW	SE	SW	29	6	S	92	W	S	IS		0.1	12/31/1996	12/31/1995	6/1/1990	53325.51286	5390	96CW0075	PAT GLEASON
ROSE SPRING NO 1	S	EAST DIVIDE CREEK	45	SW	SE	SW	32	7	S	90	W	S	FSW		0.033	12/31/1996	12/31/1995	7/1/1991	53325.51681	5370	96CW0347	James L Rose
ROSE SPRING NO 2	S	EAST DIVIDE CREEK	45	NE	SE	NW	5	7	S	90	W	S	FSW		0.033	12/31/1996	12/31/1995	7/1/1991	53325.51681	5371	96CW0347	James L Rose
ROSE SPRING NO 3	S	EAST DIVIDE CREEK	45	SE	SW	NW	5	7	S	90	W	S	FSW		0.033	12/31/1996	12/31/1995	7/1/1991	53325.51681	5372	96CW0347	James L Rose
ROSE SPRING NO 4	S	EAST DIVIDE CREEK	45	NE	SE	NE	7	7	S	90	W	S	FSW		0.033	12/31/1996	12/31/1995	7/1/1991	53325.51681	5373	96CW0347	James L Rose
ROSE SPRING NO 5	S	EAST DIVIDE CREEK	45	NE	SE	NE	7	7	S	90	W	S	FSW		0.033	12/31/1996	12/31/1995	7/1/1991	53325.51681	5374	96CW0347	James L Rose
ROSE SPRING NO 6	S	EAST DIVIDE CREEK	45	SE	SE	NE	7	7	S	90	W	S	FSW		0.033	12/31/1996	12/31/1995	7/1/1991	53325.51681	5375	96CW0347	James L Rose
ROSE SPRING NO 7	S	EAST DIVIDE CREEK	45	SE	SE	NE	7	7	S	90	W	S	FSW		0.5	12/31/1996	12/31/1995	7/1/1991	53325.51681	5376	96CW0347	James L Rose
ROSE WELL NO 1	W	EAST DIVIDE CREEK	45	SW	SW	NE	32	7	S	90	W	S	IF*		0.033	12/31/1996	12/31/1995	7/1/1991	53325.51681	5395	96CW0347	James L Rose
ROSE WELL NO 2	W	EAST DIVIDE CREEK	45	NW	SW	SW	7	7	S	90	W	S	IF*		0.033	12/31/1996	12/31/1995	7/1/1991	53325.51681	5396	96CW0347	James L Rose
GILIN SPRING NO 1	S	COLORADO RIVER	45	SE	SE	SE	35	7	S	96	W	S	IP*		0.033	12/31/1996	12/31/1995	3/1/1996	53386	5359	96CW0101	Gilin and Linda Jones
GILIN SPRING NO 3	S	COLORADO RIVER	45	NW	SE	SE	35	7	S	96	W	S	IP*		0.033	12/31/1996	12/31/1995	3/1/1996	53386	5361	96CW0101	Gilin and Linda Jones
GILIN SPRING NO 4	S	COLORADO RIVER	45	NW	SE	SE	35	7	S	96	W	S	IP*		0.033	12/31/1996	12/31/1995	3/1/1996	53386	5362	96CW0101	Gilin and Linda Jones
GILIN SPRING NO 5	S	COLORADO RIVER	45	NE	SW	SE	35	7	S	96	W	S	IP*		0.033	12/31/1996	12/31/1995	3/1/1996	53386	5363	96CW0101	Gilin and Linda Jones
EVANS DITCH NO 2	D	BATTLEMENT CREEK	45	SE	SE	NW	10	7	S	95	W	S	IP*		1	12/31/1996	12/31/1995	5/22/1996	53468	1156	96CW0348	JACK T EVANS
KEINATH DITCH NO 1	D	COLORADO RIVER	45	NE	NE	NE	8	8	S	96	W	S	IS		3	12/31/1996	12/31/1995	6/19/1996	53496	1160	96CW0300	STEVEN KEINATH
KEINATH PUMP AND PL	P	COLORADO RIVER	45	SE	NW	NE	5	8	S	96	W	S	IS		2.5	12/31/1996	12/31/1995	6/19/1996	53496	1161	96CW0300	STEVEN KEINATH
KEINATH WELL NO 1	W	COLORADO RIVER	45	SW	NE	NE	5	8	S	96	W	S	IDS		0.056	12/31/1996	12/31/1995	6/19/1996	53496	5393	96CW0300	STEVEN KEINATH
KEINATH WELL NO 2	W	COLORADO RIVER	45	SE	NW	NE	5	8	S	96	W	S	IDS		0.056	12/31/1996	12/31/1995	6/19/1996	53496	5394	96CW0300	STEVEN KEINATH
IMD WELL NO 1	W	COLORADO RIVER	45	NE	SE	SE	31	5	S	90	W	S	IC		0.033	12/31/1997	12/31/1996	6/1/1997	53843	5366	97CW0168	Intermountain Distrobution
BIG DRAW SPRING & SEEP	SE	COTTONWOOD FEEDER	45	NE	SE	NE	6	7	S	94	W	S	IF*		0.044	12/31/1998	12/31/1997	8/1/1997	54056.53904	5441	98CW0228	RON WILSON ADMINISTRATOR
FAIT DITCH	D	WEST DIVIDE CREEK	45	SW	NE	SW	13	7	S	92	W	S	IM*		1	12/31/1998	12/31/1997	3/2/1998	54117	1165	98CW0043	MARTY & KELLY CARTER
VAN EVERY WELL	W	DIVIDE CREEK	45	SE	NE	SE	24	6	S	92	W	S	FDS		0.033	12/31/1998	12/31/1997	3/16/1998	54131	5406	98CW0036	WILLIAM D YEIK
RAGLE WELL NO 1	W	GARFIELD CREEK	45	NE	NW	SE	22	6	S	91	W	S	IF*		0.033	12/31/1998	12/31/1997	5/12/1998	54188	5399	98CW0083	Robert & Velma Ragle
BED SPRING	S	GARFIELD CREEK	45	SW	SW	NE	9	7	S	90	W	S	RPD		0.011	12/31/1998	12/31/1997	6/15/1998	54222	5438	98CW0248	LARRY AND VIRGINA SHMUESER
BEAVER DAM SPRING	S	GARFIELD CREEK	45	SW	NW	NE	16	7	S	90	W	S	RP*		0.022	12/31/1998	12/31/1997	6/15/1998	54222	5439	98CW0248	LARRY AND VIRGINIA SHMUESER
HOMESTEAD SPRING	S	GARFIELD CREEK	45	NW	NE	NE	16	7	S	90	W	S	RPD		0.022	12/31/1998	12/31/1997	6/15/1998	54222	5440	98CW0248	LARRY AND VIRGINIA SCHMUESER
STRONG SPRING & PL NO.1	S	SPRING (RULISON)	45	NW	NE	NE	1	7	S	95	W	S	IS		0.5	12/31/1998	12/31/1997	8/14/1998	54282	5410	98CW0227	B STRONG C/O JOHN STRONG
IVY SPRINGS, STRONG PL	S	SPRING (RULISON)	45	NE	NE	NE	1	7	S	95	W	S	IS		0.5	12/31/1998	12/31/1997	8/14/1998	54282	5411	98CW0227	Williams

District 45
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
LOG MESA SPRING	S	BEAVER CREEK	45	NW	NE	NW	25	7	S	94	W	S	Dp		0.067	12/31/1998	12/31/1997	9/4/1998	54303	5028	98CW0230	GEORGE BAUER
LOG MESA SPRING # 2	S	BEAVER CREEK	45	NE	SW	NW	24	7	S	94	W	S	IP*		0.045	12/31/1998	12/31/1997	9/4/1998	54303	5437	98CW0230	GEORGE BAUER
RIVERVIEW RANCH W NO 1	W	COLORADO RIVER	45	SE	NE	SW	12	6	S	92	W	S	IDS		0.033	12/31/1999	12/31/1998	5/25/1999	54566	5425	99CW0176	Robert M Regulski
RIVERVIEW RANCH W NO 2	W	COLORADO RIVER	45	SW	NW	SE	12	6	S	92	W	S	IDS		0.033	12/31/1999	12/31/1998	5/25/1999	54566	5426	99CW0176	Robert M Regulski
RIVERVIEW RANCH W NO 3	W	COLORADO RIVER	45	SW	NW	SE	12	6	S	92	W	S	IDS		0.033	12/31/1999	12/31/1998	5/25/1999	54566	5427	99CW0176	Robert M Regulski
RIVERVIEW RANCH W NO 4	W	COLORADO RIVER	45	SW	NW	SE	12	6	S	92	W	S	IDS		0.033	12/31/1999	12/31/1998	5/25/1999	54566	5428	99CW0176	Robert M Regulski
RIVERVIEW RANCH W NO 5	W	COLORADO RIVER	45	SE	NW	SE	12	6	S	92	W	S	IDS		0.033	12/31/1999	12/31/1998	5/25/1999	54566	5429	99CW0176	Robert M Regulski
RIVERVIEW RANCH W NO 6	W	COLORADO RIVER	45	SE	SW	SE	12	6	S	92	W	S	IDS		0.033	12/31/1999	12/31/1998	5/25/1999	54566	5430	99CW0176	Robert M Regulski
WISSLER PUMP & PIPELINE	P	SPRING CREEK	45	NE	NW	SE	34	7	S	96	W	S	IR*		0.167	12/31/1999	12/31/1998	8/27/1999	54660	1171	99CW0321	ED & WANDA WISSLER
RADAR SPRING	S	COLORADO RIVER	45	NE	NE	NE	2	8	S	96	W	S	IFD		0.067	12/31/2000	12/31/1999	10/31/1991	54786.51803	1168	00CW0093	WILLIAM & SANDRA HELEY
RIPPY SPRING NO 4	S	WEST DIVIDE CREEK	45	SW	SW	NW	7	8	S	91	W		IS		0.11	12/31/2000	12/31/1999	11/1/1999	54786.54726	5587	00CW0304	DOW & KATHY RIPPY
4K SPRING NO. 1	S	COLORADO RIVER	45	NE	SE	NW	35	7	S	96	W	S	FSH		0.075	12/31/2000	12/31/1999	3/21/2000	54867	5448	00CW0045	Larry Klebold
DT SPRING II	S	COLORADO RIVER	45	SE	NE	NW	35	7	S	96	W	S	FSH		0.075	12/31/2000	12/31/1999	3/21/2000	54867	5449	00CW0046	DONALD R THROM
RIPPY PUMP & PIPELINE	P	WEST DIVIDE CREEK	45	SE	SW	NE	18	8	S	91	W		IS		3	12/31/2000	12/31/1999	5/24/2000	54931	1177	00CW0304	DOW & KATHY RIPPY
RIPPY SPRING NO 1	S	WEST DIVIDE CREEK	45	NE	NE	SW	7	8	S	91	W		IS		0.11	12/31/2000	12/31/1999	5/24/2000	54931	5584	00CW0304	DOW & KATHY RIPPY
RIPPY SPRING NO 2	S	WEST DIVIDE CREEK	45	NE	NE	SW	7	8	S	91	W		IS		0.11	12/31/2000	12/31/1999	5/24/2000	54931	5585	00CW0304	DOW & KATHY RIPPY
RIPPY SPRING NO 3	S	WEST DIVIDE CREEK	45	NW	NW	SW	7	8	S	91	W		IS		0.11	12/31/2000	12/31/1999	5/24/2000	54931	5586	00CW0304	DOW & KATHY RIPPY
OLD TRUSTY DITCH	D	WALLACE CREEK	45	SW	NE	NE	18	8	S	95	W	S	IS		1.2	12/31/2000	12/31/1999	8/22/2000	55021	714	00CW0291	NATHAN N DUTTON
CEDAR SPRING AND DITCH N0.	D	DRY CREEK (EAST)	45	NW	NE	SW	14	7	S	93	W	S	I		2.12	12/31/2000	12/31/1999	12/7/2000	55128	698	00CW0289	Phillip Miller
DIVIDE CREEK HIGHLINE D	D	WEST DIVIDE CREEK	45	SW	SE	NE	19	8	S	91	W	S	IS		3	5/24/2000	12/31/1999	12/31/2000	55152	576	00CW0304	DANNY OCONNELL
LAST CHANCE DITCH	D	COLORADO RIVER	45	SW	NE	SE	10	6	S	92	W	S	N		1	12/31/2001	12/31/2000	8/15/2000	55152.55014	668	01CW0008	PHILIP D ANTES
RFR WELL	W	COLORADO RIVER	45		SE	NW	14	6	S	93	W	S	C		0.033	12/31/2001	12/31/2000	8/15/2000	55152.55014	5445	01CW0008	LAFARGE WEST INCS
MAMM CR GRAVEL PIT WELLS	W	COLORADO RIVER	45		SW	NW	12	6	S	93	W	S	N		0.9	12/31/2001	12/31/2000	8/15/2000	55152.55014	5446	01CW0008	LaFarge Gravel Pits
LONG ALDER SPRING	S	GARFIELD CREEK	45	NE	SW	NE	32	6	S	90	W	S	ID		0.01	12/31/2001	12/31/2000	11/1/2000	55152.55092	5416	01CW0183	DAVID ALDERSON
V MEAD SPRING	S	HELMER GULCH	45	SE	SW	SW	30	6	S	93	W	S	IF*		0.022	12/31/2001	12/31/2000	3/15/2001	55226	5447	01CW0051	WALTER SQUIRES
CRUZ SPRING	S	MAMM CREEK	45	SW	SW	NE	29	6	S	91	W	S	IFS		0.22	12/31/2002	12/31/2001	2/15/2000	55517.54832	569	02CW0113	ERNESTO CRUZ AND ANNA CRUZ
PEPI SPRING NO 1	S	COLORADO RIVER	45	NW	SW	SW	11	6	S	92	W	S	IF*		0.05	12/31/2002	12/31/2001	10/1/2001	55517.55426	5582	02CW0258	Pepi J Langegger
HOMESTEAD SPRING	S	COTTONWOOD CREEK	45	NE	SE	SE	13	7	S	95	W	S	CR*	0.007	0.007	12/31/2003	12/31/2002	12/2/1980	55882.47818	5583	03CW0082	LARRY AND VIRGINIA SCHMUESER
DT SPRING #1	S	PETE AND BILL CREEK	45	SE	NE	SW	36	7	S	96	W	S	IDS		0.033	12/31/2003	12/31/2002	2/4/2003	55917	5588	03CW0015	Donald R Throm
DT SPRING #2	S	PETE AND BILL CREEK	45	SW	NE	SW	36	7	S	96	W	S	IDS		0.033	12/31/2003	12/31/2002	2/4/2003	55917	5589	03CW0016	DONALD R THROM
NEAL SPRING	S	COLORADO RIVER	45	SW	SE	NW	20	6	S	93	W	S	IF		0.002	12/31/2003	12/31/2002	4/2/2003	55974	5591	03CW0149	JOHN & MICKEY NEAL
HENRY SPRING NO 2	S	UNNAMED TRIB(COLO R)	45	SE	NW	SW	3	7	S	95	W	S	ID		0.11	12/31/1989	12/31/1988	2/7/2004	56285	5590	04CW0020	Gaylord & Phillis Henry

Notes:
Highlighted rows indicate conditional water right may be used for energy development water demand
Data Sources Include - Colorado Decisions Support System (CDSS) Database, Hydrobase Colorado Division of Water Resources (DWR), and personal discussion with water commissioner

District 45
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
W DIVIDE PROJ KENDIG RES	R	WEST DIVIDE CREEK	45	SE	NW	SE	7	8	S	91	W	S	IC*		15450	23932	19420	4/22/1957	39193	3585	257	West Divide Water Conservancy District
W DIVIDE PROJ W MAMM RES	R	WEST MAMM CREEK	45	SW	SE	SW	13	7	S	93	W	S	IC*		6500	23932	19420	4/22/1957	39193	3588	257A	West Divide Water Conservancy District
ALSBURY RESERVOIR	R	EAST DIVIDE CREEK	45	SW	SW	NE	30	8	S	90	W	S	IM*	182	67.76	23932	19420	6/15/1961	40708	3695	271	West Divide Water Conservancy District
JONATHAN GANT RESERVOIR	R	WEST MAMM CREEK	45	SW	NE	NW	23	7	S	93	W	S	I		61.6	12/31/1972	12/31/1971	8/28/1972	44800	3584	W1622	BARBARA A & NANCY S PITMAN
RIVERBEND EFFLUENT POND	R	COLORADO RIVER	45	NW	NW	NE	6	6	S	90	W	S	IM*		97.5	12/31/1973	12/31/1972	6/1/1973	45077	3679	W2126	MESA STRUCTURES INC
MONUMENT RESERVOIR NO 3	R	SPRING GULCH	45	NW	NW	SW	20	7	S	95	W	S	IM*		500	12/31/1973	12/31/1972	7/24/1973	45130	3624	W2013	Battlement Mesa Metro District
BARTON PORTER RESERVOIR	R	ALKALI CREEK (EAST)	45	SE	NW	SW	15	6	S	90	W	S	I		1000	12/31/1975	12/31/1974	10/19/1972	45655.44852	3603	W2726	BARTON PORTER
DRY HOLLOW RESERVOIR	R	DRY HOLLOW CREEK	45	NE	NW	SW	3	7	S	92	W	S	IN*		45000	12/31/1979	12/31/1978	4/22/1957	47116.39193	3645	79CW0308	COLO RIVER WATER CONSERV DIST
W DIVIDE PROJ KENDIG RES	R	WEST DIVIDE CREEK	45	SE	NW	SE	7	8	S	91	W	S	IN*		2610	12/31/1979	12/31/1978	6/18/1979	47285	3585	79CW0315	COLORADO RIVER DIST
MESA LAKE NO 3	R	COLORADO RIVER	45	NW	NE	SE	13	7	S	96	W	S	IM*	21.2	14.9	12/31/1979	12/31/1978	12/26/1979	47476	3655	79CW0349	Battlement Mesa Metro District
MESA LAKE NO 4	R	UNNAMED TRIB(COLO R)	45	NE	NW	SW	18	7	S	95	W	S	IM*		2	12/31/1979	12/31/1978	12/26/1979	47476	3656	79CW0349	Battlement Mesa Metro District
MESA LAKE NO 5	R	UNNAMED TRIB(COLO R)	45	NW	NE	SW	18	7	S	95	W	S	IM*		1.4	12/31/1979	12/31/1978	12/26/1979	47476	3657	79CW0349	Battlement Mesa Metro District
FRONT NINE POND	R	UNNAMED TRIB(COLO R)	45	NE	NE	SE	7	7	S	95	W	S	IM*	2.3	0.3	12/31/1979	12/31/1978	12/26/1979	47476	3727	89CW0200	BMI C/O WE RASMUSSEN
BATTLEMENT MESA AUG PLAN	P	COLORADO RIVER	45				18	7	S	95	W	S	IM*		0.3	12/31/1979	12/31/1978	12/26/1979	47476	7078	89CW0200	BATLMNT MESA METRO D
RAGLE RESERVOIR NO 1	R	GARFIELD CREEK	45	NE	NW	SE	22	6	S	91	W	S	IP*		2	12/31/1981	12/31/1980	12/31/1961	47847.40907	3676	81CW0333	Battlement Mesa Metro District
RAGLE RESERVOIR NO 2	R	GARFIELD CREEK	45	NE	NW	SE	22	6	S	91	W	S	IP*		2	12/31/1981	12/31/1980	12/31/1961	47847.40907	3677	81CW0333	Robert Ragle
RAGLE RESERVOIR NO 3	R	GARFIELD CREEK	45	NE	NW	SE	22	6	S	91	W	S	IP*		2	12/31/1981	12/31/1980	12/31/1961	47847.40907	3678	81CW0333	Robert Ragle
PARKER RESERVOIR NO 01	R	WEST MAMM CREEK	45	NE	NE	NW	5	8	S	93	W	S	IS		2	12/31/1981	12/31/1980	8/31/1979	47847.47359	3661	81CW0079	Abandoned
PARKER RESERVOIR NO 04	R	WEST MAMM CREEK	45	SW	NW	SE	14	7	S	93	W	S	IS		0.5	12/31/1981	12/31/1980	8/31/1979	47847.47359	3671	81CW0079	Daniel & Grechen Dumis
PARKER RESERVOIR NO 04A	R	WEST MAMM CREEK	45	SW	NW	SE	14	7	S	93	W	S	IS		0.5	12/31/1981	12/31/1980	8/31/1979	47847.47359	3672	81CW0079	Daniel & Grechen Dumis
PARKER RESERVOIR NO 05	R	WEST MAMM CREEK	45	SE	NW	SW	32	7	S	93	W	S	IS		0.8	12/31/1981	12/31/1980	8/31/1979	47847.47359	3673	81CW0079	Daniel & Grechen Dumis
PARKER RESERVOIR NO 19	R	DRY CREEK (EAST)	45	NE	NE	SE	15	7	S	93	W	S	IS		2	12/31/1981	12/31/1980	9/30/1979	47847.47389	3666	81CW0079	Daniel & Grechen Dumis
PARKER RESERVOIR NO 20	R	WEST MAMM CREEK	45	NE	NE	NW	5	8	S	93	W	S	IS		2	12/31/1981	12/31/1980	9/30/1979	47847.47389	3669	81CW0079	Daniel & Grechen Dumis
FRANK RESERVOIR	R	SOUTH CANON CREEK	45	NE	SE	NW	26	6	S	90	W	S	IR*	4	64	12/31/1981	12/31/1980	6/1/1980	47847.47634	3703	81CW0425	CHARLOTTE A HOOD
CLARK RESERVOIR	R	UNNAMED TRIB(COLO R)	45	SW	NE	SE	35	9	S	97	W	S	IS		3.1	12/31/1982	12/31/1981	6/1/1981	48212.47999	3647	82CW0160	THOMAS CLARK
COAL RIDGE RESERVOIR	R	COLORADO RIVER	45	SE	SW	SE	35	5	S	90	W	S	IM*		2000	12/31/1983	12/31/1982	9/14/1983	48834	3694	83CW0368	CB MINERALS CO, LLC
CHIARAMONTE DAM	R	WEST DIVIDE CREEK	45	NE	SW	NW	7	8	S	91	W	S	IDS		2	12/31/1987	12/31/1986	10/1/1986	50038.49947	3711	87CW0128	FRANCIS CHIARAMONTE
BURNS RESERVOIR	R	WALLACE CREEK	45	SE	SW	SW	27	8	S	95	W	S	ID*		5	12/31/1988	12/31/1987	5/21/1988	50545	3731	88CW0417	U S FOREST SERVICE
DEPAOLO NO 1 RESERVOIR	R	DIVIDE CREEK	45	SE	SE	SW	24	6	S	92	W	S	I		2	12/31/1990	12/31/1989	3/2/1990	51195	3729	90CW0076	Charmine Depaolo
RODREICK POND NO 2	R	EAST GULCH (GIBSON)	45	SE	NE	SW	30	6	S	91	W	S	IP*		1.84	12/31/1990	12/31/1989	5/18/1990	51272	3717	90CW0100	Dan and Mary Perry
RODREICK POND NO 7	R	EAST GULCH (GIBSON)	45	NW	NE	SE	30	6	S	91	W	S	IP*		1.03	12/31/1990	12/31/1989	5/18/1990	51272	3722	90CW0100	Dan and Mary Perry
BALDY RESERVOIR	R	EAST DIVIDE CREEK	45	SW	SW	NE	30	8	S	90	W	S	IC*		100	12/31/1990	12/31/1989	9/12/1990	51389	3521	90CW0200	W DIV WATER CONS DST
LANG POND NO 1	R	UNNAMED TRIB(COLO R)	45	NE	SW	SE	32	6	S	94	W	S	IFS		0.5	12/31/1990	12/31/1989	10/6/1990	51413	3730	90CW0217	M D Lang - Birchfield
RIEGER POND	R	EAST GULCH (GIBSON)	45	SW	SE	SW	30	6	S	91	W	S	IPS		4	12/31/1992	12/31/1991	12/31/1992	52230	3715	92CW0344	DAN & MARY RODREICK
LEVERICH POND NO 1	R	EAST DIVIDE CREEK	45	SE	NW	SE	25	7	S	91	W	S	PF*		10	12/31/1994	12/31/1993	4/26/1994	52711	3734	94CW0182	Chris Leverich
LEVERICH POND NO 2	R	EAST DIVIDE CREEK	45	SW	NE	SW	25	7	S	91	W	S	PF*		10	12/31/1994	12/31/1993	4/26/1994	52711	3735	94CW0182	Chris Leverich
LEVERICH POND NO 3	R	EAST DIVIDE CREEK	45	SW	SE	NE	35	7	S	91	W	S	PF*		10	12/31/1994	12/31/1993	4/26/1994	52711	3736	94CW0182	Chris Leverich
LEVERICH POND NO 4	R	EAST DIVIDE CREEK	45	SE	SE	NE	35	7	S	91	W	S	PF*		10	12/31/1994	12/31/1993	4/26/1994	52711	3737	94CW0182	Chris Leverich
LEVERICH POND NO 5	R	EAST DIVIDE CREEK	45	SE	SE	NE	35	7	S	91	W	S	PF*		10	12/31/1994	12/31/1993	4/26/1994	52711	3738	94CW0182	Chris Leverich
LEVERICH POND NO 6	R	EAST DIVIDE CREEK	45	SW	SW	SE	36	7	S	91	W	S	PF*		10	12/31/1994	12/31/1993	4/26/1994	52711	3739	94CW0182	Chris Leverich
LEVERICH POND NO 7	R	EAST DIVIDE CREEK	45	SW	SW	SE	36	7	S	91	W	S	PF*		10	12/31/1994	12/31/1993	4/26/1994	52711	3740	94CW0182	Chris Leverich
LEVERICH POND NO 8	R	EAST DIVIDE CREEK	45	NW	SW	SE	36	7	S	91	W	S	PF*		10	12/31/1994	12/31/1993	4/26/1994	52711	3741	94CW0182	Chris Leverich
MCPHERSON POND	R	DIVIDE CREEK	45	SE	NW	SW	12	6	S	92	W	S	MC*		14.64	12/31/1995	12/31/1994	5/1/1977	52960.46507	3533	95CW0326	CSCCN LLC & VALLEY FARMS & MCP
STILLWATER POND NO 11	R	COLORADO RIVER	45	SE	NE	NE	14	6	S	92	W	S	IM*	1.03	1.03	12/31/1995	12/31/1994	5/1/1978	52960.46872	3542	95CW0326	CSCCN LLC & VALLEY FARMS & MCP
STILLWATER POND NO 12	R	COLORADO RIVER	45	SE	NE	NE	14	6	S	92	W	S	IM*	0.23	3.77	12/31/1995	12/31/1994	5/1/1978	52960.46872	3543	95CW0326	CSCCN LLC & VALLEY FARMS & MCP
SIERRA PINYON POND NO 1	R	DRY HOLLOW CREEK	45	SW	NE	NW	22	6	S	92	W	S	IP*		7	12/31/1995	12/31/1994	3/23/1995	53042	3744	95CW0057	BARTON PORTER
SIERRA PINYON POND NO 2	R	DRY HOLLOW CREEK	45	SW	NE	NW	22	6	S	92	W	S	IP*		7	12/31/1995	12/31/1994	3/23/1995	53042	3745	95CW0057	BARTON PORTER
STILLWATER POND NO 1	R	UNNAMED TRIB(COLO R)	45	NW	NW	NW	13	6	S	92	W	S	IM*		3.91	12/31/1995	12/31/1994	8/28/1995	53200	3534	95CW0326	CSCCN LLC & VALLEY FARMS & MCP
STILLWATER POND NO 2	R	UNNAMED TRIB(COLO R)	45	SE	NE	NE	14	6	S	92	W	S	IM*		4.79	12/31/1995	12/31/1994	8/28/1995	53200	3535	95CW0326	CSCCN LLC & VALLEY FARMS & MCP

District 45
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
STILLWATER POND NO 5	R	UNNAMED TRIB(COLO R)	45	SW	NW	NW	14	6	S	92	W	S	IM*		17.81	12/31/1995	12/31/1994	8/28/1995	53200	3536	95CW0326	CSCCN LLC & VALLEY FARMS & MCP
STILLWATER POND NO 6	R	UNNAMED TRIB(COLO R)	45	NE	NE	NE	15	6	S	92	W	S	IM*		13.24	12/31/1995	12/31/1994	8/28/1995	53200	3537	95CW0326	CSCCN LLC & VALLEY FARMS & MCP
STILLWATER POND NO 7	R	UNNAMED TRIB(COLO R)	45	NW	NE	NW	15	6	S	92	W	S	IM*		4.63	12/31/1995	12/31/1994	8/28/1995	53200	3538	95CW0326	CSCCN LLC & VALLEY FARMS & MCP
STILLWATER POND NO 8	R	COLORADO RIVER	45	SW	NW	SW	10	6	S	92	W	S	IM*		0.86	12/31/1995	12/31/1994	8/28/1995	53200	3539	95CW0326	CSCCN LLC & VALLEY FARMS & MCP
STILLWATER POND NO 9	R	COLORADO RIVER	45	SE	NE	SE	9	6	S	92	W	S	IM*		7.14	12/31/1995	12/31/1994	8/28/1995	53200	3540	95CW0326	CSCCN LLC & VALLEY FARMS & MCP
STILLWATER POND NO 10	R	COLORADO RIVER	45	SE	NE	SE	9	6	S	92	W	S	IM*		3.16	12/31/1995	12/31/1994	8/28/1995	53200	3541	95CW0326	CSCCN LLC & VALLEY FARMS & MCP
EVANS POND NO 1	R	BATTLEMENT CREEK	45	NW	NW	NW	10	7	S	95	W	S	IP*		10	12/31/1996	12/31/1985	9/21/1995	53224	3522	95CW0344	Jack T Evans Jr.
EVANS POND NO 2	R	BATTLEMENT CREEK	45	NE	NW	NW	10	7	S	95	W	S	IP*		10	12/31/1996	12/31/1985	9/21/1995	53224	3523	95CW0344	Jack T Evans Jr.
ROSE POND NO 1	R	EAST DIVIDE CREEK	45	SW	NE	SW	32	7	S	90	W	S	PF*		8	12/31/1996	12/31/1995	7/1/1991	53325.51681	3511	96CW0347	James L. Rose
ROSE POND NO 2	R	EAST DIVIDE CREEK	45	NW	NE	SW	32	7	S	90	W	S	PF*		5	12/31/1996	12/31/1995	7/1/1991	53325.51681	3512	96CW0347	James L. Rose
ROSE POND NO 3	R	EAST DIVIDE CREEK	45	NE	NE	SW	32	7	S	90	W	S	PF*		5	12/31/1996	12/31/1995	7/1/1991	53325.51681	3513	96CW0347	James L. Rose
ROSE POND NO 4	R	EAST DIVIDE CREEK	45	NE	NE	SW	32	7	S	90	W	S	PF*		5	12/31/1996	12/31/1995	7/1/1991	53325.51681	3514	96CW0347	James L. Rose
ROSE POND NO 5	R	EAST DIVIDE CREEK	45	NE	NE	SW	32	7	S	90	W	S	PF*		5	12/31/1996	12/31/1995	7/1/1991	53325.51681	3515	96CW0347	James L. Rose
ROSE POND NO 6	R	EAST DIVIDE CREEK	45	NW	NW	SW	32	7	S	90	W	S	PF*		15	12/31/1996	12/31/1995	7/1/1991	53325.51681	3516	96CW0347	James L. Rose
ROSE POND NO 7	R	EAST DIVIDE CREEK	45	NW	NW	SW	32	7	S	90	W	S	PF*		20	12/31/1996	12/31/1995	7/1/1991	53325.51681	3517	96CW0347	James L. Rose
ROSE POND NO 8	R	EAST DIVIDE CREEK	45	SW	SE	SW	5	7	S	90	W	S	PF*		5	12/31/1996	12/31/1995	7/1/1991	53325.51681	3518	96CW0347	James L. Rose
ROSE POND NO 9	R	EAST DIVIDE CREEK	45	NW	SE	NW	5	7	S	90	W	S	PF*		15	12/31/1996	12/31/1995	7/1/1991	53325.51681	3519	96CW0347	James L. Rose
ROSE POND NO 10	R	EAST DIVIDE CREEK	45	SE	SE	NE	7	7	S	90	W	S	PF*		10	12/31/1996	12/31/1995	7/1/1991	53325.51681	3520	96CW0347	James L. Rose
GILIN POND NO 1	R	COLORADO RIVER	45	SE	SE	SE	35	7	S	96	W	S	IP*		5	12/31/1996	12/31/1995	3/1/1996	53386	3504	96CW0101	Gilin & Linda Jones
GILIN POND NO 2	R	COLORADO RIVER	45	NW	SE	SE	35	7	S	96	W	S	IP*		5	12/31/1996	12/31/1995	3/1/1996	53386	3505	96CW0101	Gilin & Linda Jones
GILIN POND NO 3	R	COLORADO RIVER	45	NW	SE	SE	35	7	S	96	W	S	IP*		5	12/31/1996	12/31/1995	3/1/1996	53386	3506	96CW0101	Gilin & Linda Jones
GILIN POND NO 4	R	COLORADO RIVER	45	NW	SE	SE	35	7	S	96	W	S	IP*		5	12/31/1996	12/31/1995	3/1/1996	53386	3507	96CW0101	Gilin & Linda Jones
GILIN POND NO 5	R	COLORADO RIVER	45	NE	SW	SE	35	7	S	96	W	S	IP*		5	12/31/1996	12/31/1995	3/1/1996	53386	3508	96CW0101	Gilin & Linda Jones
KEINATH MAIN HOUSE POND	R	COLORADO RIVER	45	NE	SW	SW	4	8	S	96	W	S	PFS		10	12/31/1996	12/31/1995	6/19/1996	53496	3526	96CW0300	STEVEN KEINATH
KEINATH POND NO 2	R	COLORADO RIVER	45	SE	SW	SE	5	8	S	96	W	S	IP*		10	12/31/1996	12/31/1995	6/19/1996	53496	3527	96CW0300	STEVEN KEINATH
J & K POND	R	DRY HOLLOW CREEK	45	SE	SW	NE	34	6	S	92	W	S	O		1.4	12/31/1997	12/31/1996	7/1/1997	53873	3532	97CW0238	Jerry & Kris Hoffmeister
BIG DRAW RESERVOIR	R	COTTONWOOD FEEDER	45	NE	SE	NE	6	7	S	94	W	S	IF*		5	12/31/1998	12/31/1997	8/1/1997	54056.53904	3553	98CW0228	RON WILSON ADMINISTRATOR
FAIT POND	R	WEST DIVIDE CREEK	45	SW	NE	SW	13	7	S	92	W	S	IP*		0.5	12/31/1998	12/31/1997	3/2/1998	54117	3530	98CW0043	MARTY & KELLY CARTER
BEAVER DAM RESERVOIR	R	GARFIELD CREEK	45	NW	NW	NE	16	7	S	90	W	S	RP*		5	12/31/1998	12/31/1997	6/15/1998	54222	3552	98CW0248	LARRY AND VIRGINIA SHMUESER
LOG MESA POND	R	BEAVER CREEK	45	NE	SW	NW	24	7	S	94	W	S	PDA		5	12/31/1998	12/31/1997	9/4/1998	54303	3551	98CW0230	GEORGE BAUR
WISSLER POND	R	SPRING CREEK	45	NE	NW	SE	34	7	S	96	W	S	IR*		0.083	12/31/1999	12/31/1998	8/27/1999	54660	3550	99CW0321	ED & WANDA WISSLER
RIPPY POND NO 1	R	WEST DIVIDE CREEK	45	SW	SE	NW	7	8	S	91	W		IP*		0.121	12/31/2000	12/31/1999	11/1/1998	54786.54361	3554	00CW0304	Rippy RV Associates
ENGELHARDT POND	R	DRY HOLLOW CREEK	45	SW	NW	NE	34	6	S	92	W	S	FD*	0.62	0.88	12/31/2000	12/31/1999	9/9/1999	54786.54673	3549	00CW0010	DEBRA KAY ENGELHARDT
BOTKIN POND	R	UNNAMED TRIB(COLO R)	45	SW	NE	NW	10	7	S	95	W	S	A		0.086	12/31/2000	12/31/1999	2/8/2000	54825	3548	00CW0054	GUY & ROBERTA BOTKIN
RIPPY POND NO 2	R	WEST DIVIDE CREEK	45	SE	SW	NW	7	8	S	91	W		IP*		0.526	12/31/2000	12/31/1999	5/24/2000	54931	3555	00CW0304	Dow & Kathy Rippy
RIPPY POND NO 3	R	WEST DIVIDE CREEK	45	NE	SW	NW	7	8	S	91	W		IP*		0.132	12/31/2000	12/31/1999	5/24/2000	54931	3556	00CW0304	Dow & Kathy Rippy
RIPPY POND NO 4	R	WEST DIVIDE CREEK	45	NE	SW	NW	7	8	S	91	W		IP*		0.796	12/31/2000	12/31/1999	5/24/2000	54931	3557	00CW0304	Dow & Kathy Rippy
RIPPY POND NO 5	R	WEST DIVIDE CREEK	45	SE	NW	NW	7	8	S	91	W		IP*		1.09	12/31/2000	12/31/1999	5/24/2000	54931	3558	00CW0304	Dow & Kathy Rippy
RIPPY POND NO 6	R	WEST DIVIDE CREEK	45	SE	NW	NW	7	8	S	91	W		IP*		0.697	12/31/2000	12/31/1999	5/24/2000	54931	3559	00CW0304	Dow & Kathy Rippy
RIPPY POND NO 7	R	WEST DIVIDE CREEK	45	SE	NW	NW	7	8	S	91	W		IP*		0.697	12/31/2000	12/31/1999	5/24/2000	54931	3560	00CW0304	Dow & Kathy Rippy
RIPPY POND NO 8	R	WEST DIVIDE CREEK	45	NE	SW	NW	7	8	S	91	W		IP*		0.333	12/31/2000	12/31/1999	5/24/2000	54931	3561	00CW0304	Dow & Kathy Rippy
RIPPYRESERVOIR NO 1	R	WEST DIVIDE CREEK	45	NW	SW	NE	18	8	S	91	W		IP*		54.6	12/31/2000	12/31/1999	5/24/2000	54931	3562	00CW0304	Dow & Kathy Rippy
NAUROTH POND NO 1	R	SPRING CREEK	45	NW	NE	SE	2	8	S	96	W	S	IS		25	12/31/2000	12/31/1999	8/22/2000	55021	3546	00CW0291	John & Dorothy Nauroth
LONG ALDER POND	R	GARFIELD CREEK	45	NE	SW	NE	32	6	S	90	W	S	FO		0.5	12/31/2001	12/31/2000	11/1/2000	55152.55092	3545	01CW0183	DAVID ALDERSON

Notes:
Highlighted rows indicate conditional water right may be used for energy development water demand
Data Sources Include - Colorado Decisions Support System (CDSS) Database, Hydrobase Colorado Division of Water Resources (DWR), and personal discussion with water commissioner

District 70
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
CISSNA DITCH NO 1	D	CONN CREEK	70	SW	SE	SW	32	6	S	97	W	S	I	0.5	0.5	7/13/1914	11/10/1913	5/1/1910	23324.22035	518	154BBB	Abandoned
CISSNA DITCH NO 2	D	CONN CREEK	70	NE	SW	NW	5	7	S	97	W	S	I	0.5	0.5	7/13/1914	11/10/1913	5/1/1910	23324.22035	519	154BB	Abandoned
KOBE CANAL	D	COLORADO RIVER	70	NW	SW	NE	27	8	S	97	W	S	IM*	1.7	48.3	25882	13526	6/30/1936	31787.31592	558	184	COLO RIVER DIST, BLUESTONE WCD
MT LOGAN CANAL	D	ROAN CREEK	70	NE	NW	NW	5	8	S	97	W	S	IMN		40	11/10/70	01/11/37	6/30/1936	31787.31592	569	185	COLO RIVER DIST, BLUESTONE WCD
ROAN CREEK FEEDER CANAL	D	ROAN CREEK	70	NE	NE	SE	4	7	S	98	W	S	IM*		75	11/10/70	01/11/37	6/30/1936	31787.31592	585	187	COLO R CONS DIST BLUESTONE WCD
GALYEAN WELL	W	ROAN CREEK	70	NE	SE	NE	8	7	S	98	W	S	IDS	0.5	0.5	12/31/72		5/15/1948	35929	5040	W1207	TEXACO INC
PACIFIC OIL CO PL NO 2	D	COLORADO RIVER	70	NW	NW	SW	27	8	S	97	W	S	IM*	1	27.63	11/10/70	01/11/37	6/9/1953	37780	577	190	SHELL FRONTIER OIL & GAS INC
LETSON WELL	W	ROAN CREEK	70	SW	SW	NE	7	8	S	97	W	S	IDS	0.5	0.5	12/31/72		9/18/1959	40072	5048	W1208	TEXACO INC
CLEAR CREEK FEEDER PL	L	CLEAR CREEK	70	SW	SW	SE	4	6	S	98	W	S	IM*		50	11/10/70	01/11/37	2/8/1965	42042	522	193	SHELL FRONTIER OIL & GAS INC
CONN CREEK FEEDER PL	L	CONN CREEK	70	NW	NE	SE	19	7	S	97	W	S	IM*		50	11/10/70	01/11/37	2/8/1965	42042	524	192	SHELL FRONTIER OIL & GAS INC
DEER PARK GULCH PMP & PL	P	COLORADO RIVER	70	SW	SE	NW	27	8	S	97	W	S	IM*		150	11/10/70	01/11/37	2/8/1965	42042	532	194	SHELL FRONTIER OIL & GAS INC
UNA RES POWER CONDUIT	DLZ	COLORADO RIVER	70	NE	NE	SE	13	8	S	97	W	S	IC*		200	11/10/66	09/05/52	3/16/1965	42078	640	1968	Abandoned
LOGAN WASH WELL	S	ROAN CREEK	70	NW	NW	NW	6	8	S	97	W	S	IN*		6	12/31/72		6/3/1965	42157	5114	W1209	WILLIAM C PRATHER
CASCADE CANYON PIPELINE	L	CONN CREEK	70	SE	NE	SE	9	6	S	97	W	S	IM*		10	11/10/70	01/11/37	8/25/1966	42605	515	199	OXY USA INC
CONN CREEK PIPELINE	L	CONN CREEK	70	NE	NW	NW	17	6	S	97	W	S	IM*		10	11/10/70	01/11/37	8/25/1966	42605	525	201	OXY USA INC
PRATHER & SAVAGE WELL 1	W	ROAN CREEK	70	NW	SE	SE	7	8	S	97	W	S	IN*	3	3	12/31/72		6/9/1967	42893	5005	W0752	John Savage
SPEAR RANCH WELL	W	ROAN CREEK	70		NE	SW	31	7	S	97	W	S	IDS	0.5	0.5	12/31/1972	12/31/1971	6/30/1948	44559.35975	5083	W1206	ROBERT PRATHER
D BRACKET D SPRING	S	ROAN CREEK	70	NE	SW	SW	33	6	S	98	W	S	IDS	0.25	0.75	12/31/1972	12/31/1971	8/31/1967	44559.42976	618	W0517	GEORGEANNE WALKER
LOGAN WASH MINE	S	ROAN CREEK	70	NE	NE	SE	25	7	S	97	W	S	N		0.11	12/31/1973	12/31/1972	9/1/1972	44925.44804	5104	W1895	OCCIDENTAL SHALE OIL
LW-27 WELL	S	ROAN CREEK	70	SE	NE	NE	25	7	S	97	W	S	O		0.11	12/31/1973	12/31/1972	3/30/1973	45014	5106	W1897	OCCIDENTAL SHALE OIL
LOGAN WASH MINE NO 3-C	S	ROAN CREEK	70	NW	SW	SE	25	7	S	97	W	S	N		0.11	12/31/1974	12/31/1973	2/1/1974	45322	5105	W2223	OCCIDENTAL SHALE OIL
WW-1 WELL	W	ROAN CREEK	70	SW	NW	NE	25	7	S	97	W	S	IM*	0.165	0.165	12/31/1974	12/31/1973	11/22/1974	45616	5091	W2539	OCCIDENTAL SHALE OIL
UNA RES POWER CONDUIT	DLZ	COLORADO RIVER	70	NE	NE	SE	13	8	S	97	W	S	p		2500	12/31/1978	12/31/1977	9/29/1978	47023	640	W3989	Abandoned
DEBEQUE WTR WK PL & P ST	P	COLORADO RIVER	70	SW	SE	NW	27	8	S	97	W	S	IM*		0.75	12/31/1980	12/31/1979	5/25/1952	47481.374	531	80CW0079	TOWN OF DEBEQUE
LOGAN WASH PUMP NO 1	S	ROAN CREEK	70	NE	NE	NE	17	8	S	97	W	S	IND	1.1	2.9	12/31/1980	12/31/1979	10/30/1979	47481.47419	637	80CW0024	OCCIDENTAL SHALE OIL
SCHOOL DISTRICT WELL	W	ROAN CREEK	70	SW	NE	SW	21	8	S	97	W	S	I		0.25	12/31/1980	12/31/1979	10/30/1979	47481.47419	5099	83CW0033	DEBEQUE SCHOOL DIST
PACIFIC SPRING NO 2	S	CLEAR CREEK	70	SW	SE	NW	24	6	S	98	W	S	IM*		0.06	12/31/1983	12/31/1982	5/1/1982	48577.48333	5136	83CW0366	Shell Western E & P
PACIFIC SPRING NO 3	S	CLEAR CREEK	70	NE	NE	NE	26	6	S	98	W	S	IM*		0.03	12/31/1983	12/31/1982	5/1/1982	48577.48333	5137	83CW0366	Shell Western E & P
PACIFIC SPRING NO 4	S	CONN CREEK	70	SW	SW	SE	19	6	S	97	W	S	IM*		0.02	12/31/1983	12/31/1982	5/1/1982	48577.48333	5138	83CW0366	Shell Western E & P
PACIFIC SPRING NO 5	S	CONN CREEK	70	SE	NE	NW	19	6	S	97	W	S	IM*		0.07	12/31/1983	12/31/1982	5/1/1982	48577.48333	5139	83CW0366	Shell Western E & P
PACIFIC SPRING NO 6	S	CONN CREEK	70	SW	SE	SE	7	6	S	97	W	S	IM*		0.05	12/31/1983	12/31/1982	5/1/1982	48577.48333	5140	83CW0366	Shell Western E & P
PACIFIC SPRING NO 7	S	CLEAR CREEK	70	NW	NE	NW	7	6	S	97	W	S	IM*		0.06	12/31/1983	12/31/1982	5/1/1982	48577.48333	5141	83CW0366	Shell Western E & P
PACIFIC SPRING NO 8	S	CLEAR CREEK	70	NW	NE	SE	6	6	S	97	W	S	IM*		0.08	12/31/1983	12/31/1982	5/1/1982	48577.48333	5142	83CW0366	Shell Western E & P
PACIFIC SPRING NO 9	S	CONN CREEK	70	NE	SW	SE	18	6	S	97	W	S	IM*		0.04	12/31/1983	12/31/1982	5/1/1982	48577.48333	5143	83CW0366	Shell Western E & P
PACIFIC SPRING NO 10	S	CONN CREEK	70	SE	NE	SE	7	6	S	97	W	S	IM*		0.04	12/31/1983	12/31/1982	5/1/1982	48577.48333	5144	83CW0366	Shell Western E & P
PACIFIC SPRING NO 1	S	CLEAR CREEK	70	SW	NW	SE	13	6	S	98	W	S	IM*		0.02	12/31/1983	12/31/1982	5/1/1982	48577.48333	5145	83CW0366	Shell Western E & P
GETTY SPRING 09A	S	CLEAR CREEK	70	NE	SW	NW	35	5	S	97	W	S	IM*	0.033	0.327	12/31/1983	12/31/1982	7/1/1983	48759	5188	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 10A	S	CLEAR CREEK	70	NE	SW	SE	27	5	S	97	W	S	IM*	0.033	0.787	12/31/1983	12/31/1982	7/1/1983	48759	5190	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 10B	S	CLEAR CREEK	70	NE	SW	SE	27	5	S	97	W	S	IM*	0.033	0.017	12/31/1983	12/31/1982	7/1/1983	48759	5191	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 11A	S	CLEAR CREEK	70	NW	NE	NW	27	5	S	97	W	S	IM*	0.033	0.187	12/31/1983	12/31/1982	7/1/1983	48759	5197	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 11B	S	CLEAR CREEK	70	SW	NE	NW	27	5	S	97	W	S	IM*	0.033	0.027	12/31/1983	12/31/1982	7/1/1983	48759	5198	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 11C	S	CLEAR CREEK	70	SE	NW	NW	27	5	S	97	W	S	IM*	0.033	0.027	12/31/1983	12/31/1982	7/1/1983	48759	5199	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 11E	S	CLEAR CREEK	70	NE	SW	NW	27	5	S	97	W	S	IM*	0.033	0.007	12/31/1983	12/31/1982	7/1/1983	48759	5201	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 12C	S	CLEAR CREEK	70	NE	NE	NE	28	5	S	97	W	S	IM*	0.033	0.027	12/31/1983	12/31/1982	7/1/1983	48759	5205	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 14A	S	CLEAR CREEK	70	NE	NW	SW	21	5	S	97	W	S	IM*	0.033	0.127	12/31/1983	12/31/1982	7/1/1983	48759	5211	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 14E	S	CLEAR CREEK	70	NE	SE	NE	29	5	S	97	W	S	IM*	0.033	0.027	12/31/1983	12/31/1982	7/1/1983	48759	5215	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 15A	S	CLEAR CREEK	70	SW	SE	SE	20	5	S	97	W	S	IM*	0.033	0.047	12/31/1983	12/31/1982	7/1/1983	48759	5216	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 15B	S	CLEAR CREEK	70	NE	NW	SE	20	5	S	97	W	S	IM*	0.033	0.027	12/31/1983	12/31/1982	7/1/1983	48759	5217	83CW0365	CHEVRON TEXACO SHALE OIL CO

District 70
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
GETTY SPRING 16B	S	CLEAR CREEK	70	SE	SE	SE	29	5	S	97	W	S	IM*	0.033	0.057	12/31/1983	12/31/1982	7/1/1983	48759	5219	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 17A	S	CLEAR CREEK	70	NW	NE	SW	2	6	S	98	W	S	IM*	0.033	0.007	12/31/1983	12/31/1982	7/1/1983	48759	5221	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 18A	S	CLEAR CREEK	70	NW	SE	SW	17	5	S	97	W	S	IM*	0.033	0.637	12/31/1983	12/31/1982	7/1/1983	48759	5222	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 19A	S	CLEAR CREEK	70	SE	NW	NW	29	5	S	97	W	S	IM*	0.033	0.007	12/31/1983	12/31/1982	7/1/1983	48759	5225	83CW0365	CHEVRON TEXACO SHALE OIL CO
GETTY SPRING 20A	S	CLEAR CREEK	70	SE	SE	SW	19	5	S	97	W	S	IM*	0.033	0.037	12/31/1983	12/31/1982	7/1/1983	48759	5228	83CW0365	CHEVRON TEXACO SHALE OIL CO
CITIES SERVICE SPG 03	S	CONN CREEK	70	SE	SE	SW	9	6	S	97	W	S	IM*		0.02	12/31/1984	12/31/1983	7/19/1983	48942.48777	5146	84CW0036	OXY USA INC
CITIES SERVICE SPG 07	S	CLEAR CREEK	70	SE	SW	NW	5	6	S	97	W	S	IM*		0.12	12/31/1984	12/31/1983	7/19/1983	48942.48777	5147	84CW0036	OXY USA INC
CITIES SERVICE SPG 08	S	CLEAR CREEK	70	SW	NE	SE	6	6	S	97	W	S	IM*		0.02	12/31/1984	12/31/1983	7/19/1983	48942.48777	5148	84CW0036	OXY USA INC
CITIES SERVICE SPG 11A	S	CONN CREEK	70	NW	NE	NE	18	6	S	97	W	S	IM*		0.02	12/31/1984	12/31/1983	7/19/1983	48942.48777	5149	84CW0036	OXY USA INC
CITIES SERVICE SPG 13	S	CONN CREEK	70	NE	SW	SE	18	6	S	97	W	S	IM*		0.05	12/31/1984	12/31/1983	7/19/1983	48942.48777	5150	84CW0036	OXY USA INC
CITIES SERVICE SPG 14	S	CONN CREEK	70	SW	NE	NW	19	6	S	97	W	S	IM*		0.1	12/31/1984	12/31/1983	7/19/1983	48942.48777	5151	84CW0036	OXY USA INC
CITIES SERVICE SPG 17	S	CONN CREEK	70	NW	NW	SW	4	6	S	97	W	S	IM*		0.05	12/31/1984	12/31/1983	7/19/1983	48942.48777	5153	84CW0036	OXY USA INC
CITIES SERVICE SPG 18	S	CONN CREEK	70	SE	NW	SE	5	6	S	97	W	S	IM*		0.05	12/31/1984	12/31/1983	7/19/1983	48942.48777	5154	84CW0036	OXY USA INC
CITIES SERVICE SPG 22	S	CONN CREEK	70	SE	SW	SE	4	6	S	97	W	S	IM*		0.05	12/31/1984	12/31/1983	7/19/1983	48942.48777	5155	84CW0036	OXY USA INC
CITIES SERVICE SPG 38	S	CONN CREEK	70	NE	SW	NE	22	6	S	97	W	S	IM*		0.06	12/31/1984	12/31/1983	7/19/1983	48942.48777	5156	84CW0036	OXY USA INC
CITIES SERVICE SPG 39	S	CONN CREEK	70	SW	SE	SW	15	6	S	97	W	S	IM*		0.09	12/31/1984	12/31/1983	7/19/1983	48942.48777	5157	84CW0036	OXY USA INC
CITIES SERVICE SPG 40	S	CONN CREEK	70	SE	NW	NW	15	6	S	97	W	S	IM*		0.03	12/31/1984	12/31/1983	7/19/1983	48942.48777	5158	84CW0036	OXY USA INC
CITIES SERVICE SPG 41	S	CONN CREEK	70	NE	SW	NW	10	6	S	97	W	S	IM*		0.03	12/31/1984	12/31/1983	7/19/1983	48942.48777	5159	84CW0036	OXY USA INC
CLEAR CREEK SPRING NO 2	S	CLEAR CREEK	70	SE	SW	NE	4	5	S	99	W	S	SW		0.033	12/31/1995	12/31/1994	6/3/1994	52960.52749	5090	95CW0360	VERNON D & THELMA ADAMS
CYNDA SPRING	S	CLEAR CREEK	70	SW	SW	NW	4	5	S	99	W	S	SW		0.033	12/31/1995	12/31/1994	6/3/1994	52960.52749	5133	95CW0360	VERNON D & THELMA ADAMS
BRUSH CREEK SPRING	S	BRUSH CREEK	70	NW	NE	SW	6	5	S	99	W	S	SW		0.033	12/31/1995	12/31/1994	6/3/1994	52960.52749	5134	95CW0360	U S BUREAU OF LAND MANAGEMENT
FURR DITCH	D	DRY FORK	70	SW	SW	NE	10	8	S	98	W	S	IP*		3	12/31/1995	12/31/1994	3/1/1995	53020	645	95CW0134	DAVID FURR
BRIDGES-HAYES DITCH CNR ENL	D	BRUSH CREEK	70	SE	NE	NE	10	6	S	99	W	S	IPW		2	12/31/2001	12/31/2000	6/15/2001	55318	582	01CW0373	COLORADO NATURE RANCH LP
CNR LOWER DITCH	D	BRUSH CREEK	70	SW	NE	SW	24	6	S	99	W	S	IPW		2	12/31/2001	12/31/2000	6/15/2001	55318	601	01CW0373	COLORADO NATURE RANCH LP
KREPS DITCH CNR ENLARGE	D	BRUSH CREEK	70	NE	SE	NE	36	5	S	99	W	S	IPW		2	12/31/2001	12/31/2000	6/15/2001	55318	602	01CW0373	COLORADO NATURE RANCH LP
SCOTT DITCH CNR ENLARGE	D	BRUSH CREEK	70	SE	SW	SE	31	5	S	99	W	S	IPW		2	12/31/2001	12/31/2000	6/15/2001	55318	603	01CW0373	COLORADO NATURE RANCH LP
SECLUDED DITCH	D	BRUSH CREEK	70	SW	NE	SW	31	5	S	99	W	S	IPW		2	12/31/2001	12/31/2000	6/15/2001	55318	604	01CW0373	COLORADO NATURE RANCH LP
CNR SPRING NO 1	S	BRUSH CREEK	70	SE	NW	NE	24	6	S	99	W	S	CD*		0.034	12/31/2001	12/31/2000	6/15/2001	55318	5295	01CW0373	COLORADO NATURE RANCH LP
CNR SPRING NO 2	S	BRUSH CREEK	70	SE	SW	SE	11	6	S	99	W	S	CSW		0.034	12/31/2001	12/31/2000	6/15/2001	55318	5296	01CW0373	COLORADO NATURE RANCH LP
ELK CABIN SPRING	S	BRUSH CREEK	70	SW	NE	NE	2	6	S	99	W	S	IC*		0.01	12/31/2001	12/31/2000	6/15/2001	55318	5297	01CW0373	COLORADO NATURE RANCH LP
CNR LODGE WELL	W	BRUSH CREEK	70	NE	NE	NW	3	6	S	99	W	S	ICD		0.25	12/31/2001	12/31/2000	6/15/2001	55318	5298	01CW0373	COLORADO NATURE RANCH LP
CNR IRRIG WELL NO 1	W	BRUSH CREEK	70	NE	NW	SW	31	5	S	99	W	S	I		0.25	12/31/2001	12/31/2000	6/15/2001	55318	5301	01CW0373	COLORADO NATURE RANCH LP
CNR OFFICE WELL	W	BRUSH CREEK	70	SW	NE	SW	24	6	S	99	W	S	ICD		0.25	12/31/2001	12/31/2000	8/28/2002	55757	5299	01CW0373	COLORADO NATURE RANCH LP
CNR FISH CAMP WELL	W	BRUSH CREEK	70	NE	NW	SW	31	5	S	99	W	S	ICD		0.25	12/31/2001	12/31/2000	8/28/2002	55757	5300	01CW0373	COLORADO NATURE RANCH LP

Notes:
Highlighted rows indicate conditional water right may be used for energy development water demand
Data Sources Include - Colorado Decisions Support System (CDSS) Database, Hydrobase Colorado Division of Water Resources (DWR), and personal discussion with water commissioner

District 70
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
MT LOGAN DAM & RESERVOIR	R	ROAN CREEK	70	SE	NE	NW	5	8	S	97	W	S	IM*		10000	25882	13526	6/30/1936	31787.31592	3599	186	COLO R CONS DIST BLUESTONE WCD
ROAN CREEK RESERVOIR	R	ROAN CREEK	70	NW	SE	SE	25	7	S	98	W	S	IM*		12397	25882	13526	7/7/1961	40730	3602	191	CHEVRON TEXACO SHALE OIL COMPA
DEER PARK GULCH RES	R	CLEAR CREEK	70	SW	SE	SW	10	6	S	98	W	S	IM*		1533.6	25882	13526	2/8/1965	42042	3594	195	SHELL FRONTIER OIL & GAS INC
UNA RESERVOIR	R	COLORADO RIVER	70	NE	NE	SE	13	8	S	97	W	S	IN*		195983	11/10/66	09/05/52	3/16/1965	42078	3609	CA4914	Abandoned
GETTY RESERVOIR NO 1	R	ROAN CREEK	70	NE	SW	SE	9	8	S	97	W	S	NDO		2543.9	11/10/70	01/11/37	5/17/1965	42140	3595	197	Abandoned
GETTY RESERVOIR NO 2	R	ROAN CREEK	70	SW	SW	SE	8	8	S	97	W	S	NDO		20670	11/10/70	01/11/37	5/17/1965	42140	3596	198	Abandoned
CASCADE CANYON RESERVOIR	R	CONN CREEK	70	SE	NE	SE	9	6	S	97	W	S	IM*		619.47	11/10/70	01/11/37	8/25/1966	42605	3592	200	OXY USA INC
CONN CREEK RESERVOIR	R	CONN CREEK	70	SE	SW	SW	8	6	S	97	W	S	IM*		422.75	11/10/70	01/11/37	8/25/1966	42605	3593	202	OXY USA INC
ROAN CREEK RESERVOIR	R	ROAN CREEK	70	NW	SE	SE	25	7	S	98	W	S	IM*		58904	11/10/70	01/11/37	3/2/1967	42794	3602	203	CHEVRON TEXACO SHALE OIL COMPA
GETTY-SLEEPY GULCH RES	R	CLEAR CREEK	70	SE	SW	SW	17	5	S	97	W	S	CND		6538	11/10/70	01/11/37	6/27/1967	42911	3597	204	TEXACO INC
TRAIL GULCH RESERVOIR	R	ROAN CREEK	70	SW	NE	NE	28	6	S	100	W	S	IM*		5669.2	11/10/70	01/11/37	9/23/1967	42999	3603	6404	OIL SHALE CORP
PARADISE RESERVOIR	R	COLORADO RIVER	70	SE	SW	SE	13	8	S	97	W	S	IM*		36815	11/10/70	01/11/37	3/23/1968	43181	3601	206	PURE CYCLE CORPORATION
PARADISE RESERVOIR	R	COLORADO RIVER	70	SE	SW	SE	13	8	S	97	W	S	IM*		33080	11/10/70	01/11/37	11/1/1968	43404	3601	207	PURE CYCLE CORPORATION
TRAIL GULCH RES ALT PT	R	CARR CREEK	70	NE	NW	SE	24	5	S	100	W	S	IM*		950.79	12/31/1979	12/31/1978	12/27/1979	47477	3608	79CW0353	OIL SHALE CORP
UNA RESERVOIR	R	COLORADO RIVER	70	NE	NE	SE	13	8	S	97	W	S	IN*		173477	12/31/1981	12/31/1980	2/27/1981	47905	3609	81CW0344	CRWCD
ENERWEST RESERVOIR NO 1	R	DRY FORK	70	NE	SW	NW	35	7	S	99	W	S	IM*		1000	12/31/1983	12/31/1982	2/1/1982	48577.48244	3610	83CW0264	Enerwest % MDI Land
LISSA POND NO 1	R	ROAN CREEK	70	NE	SW	SW	30	5	S	100	W	S	PF*	0.82	7.18	12/31/1994	12/31/1993	8/12/1994	52819	3612	94CW0186	# 10 Enterprises LLC
PAUL POND	R	ROAN CREEK	70	NE	SW	SW	30	5	S	100	W	S	PF*	0.5	7.5	12/31/1994	12/31/1993	8/12/1994	52819	3613	94CW0186	# 10 Enterprises LLC
COOPER POND NO 1	R	ROAN CREEK	70	SE	SE	SE	31	5	S	100	W	S	PF*	0.35	7.15	12/31/1994	12/31/1993	8/12/1994	52819	3614	94CW0186	# 10 Enterprises LLC
COOPER POND NO 2	R	ROAN CREEK	70	SE	SE	SE	31	5	S	100	W	S	PF*	1.07	6.93	12/31/1994	12/31/1993	8/12/1994	52819	3615	94CW0186	# 10 Enterprises LLC
BUCK POND NO 1	R	ROAN CREEK	70	SW	SW	SE	11	6	S	101	W	S	PF*	0.78	7.22	12/31/1994	12/31/1993	8/12/1994	52819	3616	94CW0186	# 10 Enterprises LLC
BUCK POND NO 2	R	ROAN CREEK	70	NE	SW	SE	11	6	S	101	W	S	PF*		8	12/31/1994	12/31/1993	8/12/1994	52819	3617	94CW0186	# 10 Enterprises LLC
ELK POND NO 1	R	ROAN CREEK	70	NE	SW	NE	24	6	S	101	W	S	PF*	0.5	7.5	12/31/1994	12/31/1993	8/12/1994	52819	3618	94CW0186	# 10 Enterprises LLC
ELK POND NO 2	R	ROAN CREEK	70	SE	NW	NE	24	6	S	101	W	S	PF*	0.5	7.5	12/31/1994	12/31/1993	8/12/1994	52819	3619	94CW0186	# 10 Enterprises LLC
FURR POND NO 1	R	DRY FORK	70	SW	SW	NE	10	8	S	98	W	S	IP*		2.3	12/31/1995	12/31/1994	3/1/1995	53020	3620	95CW0134	David Furr
FURR POND NO 2	R	DRY FORK	70	SE	SW	NE	10	8	S	98	W	S	IP*		3.25	12/31/1995	12/31/1994	3/1/1995	53020	3621	95CW0134	David Furr
FURR POND NO 3	R	DRY FORK	70	SE	SW	NE	10	8	S	98	W	S	IP*		12.54	12/31/1995	12/31/1994	3/1/1995	53020	3622	95CW0134	David Furr
FURR POND NO 4	R	DRY FORK	70	SE	SW	NE	10	8	S	98	W	S	IP*		1.3	12/31/1995	12/31/1994	3/1/1995	53020	3623	95CW0134	David Furr
FURR POND NO 5	R	DRY FORK	70	SE	SW	NE	10	8	S	98	W	S	IP*		4	12/31/1995	12/31/1994	3/1/1995	53020	3624	95CW0134	David Furr
FURR POND NO 6	R	DRY FORK	70	SE	SW	NE	10	8	S	98	W	S	IP*		2.5	12/31/1995	12/31/1994	3/1/1995	53020	3625	95CW0134	David Furr
FURR POND NO 7	R	DRY FORK	70	SW	SE	NE	10	8	S	98	W	S	IP*		3.5	12/31/1995	12/31/1994	3/1/1995	53020	3626	95CW0134	David Furr
FURR POND NO 8	R	DRY FORK	70	SW	SE	NE	10	8	S	98	W	S	IP*		5.6	12/31/1995	12/31/1994	3/1/1995	53020	3627	95CW0134	David Furr
FURR POND NO 9	R	DRY FORK	70	NW	NE	SE	10	8	S	98	W	S	IP*		5.6	12/31/1995	12/31/1994	3/1/1995	53020	3628	95CW0134	David Furr
FURR POND NO 10	R	DRY FORK	70	NW	NE	SE	10	8	S	98	W	S	IP*		7.76	12/31/1995	12/31/1994	3/1/1995	53020	3629	95CW0134	David Furr
FURR POND NO 11	R	DRY FORK	70	NE	NE	SE	10	8	S	98	W	S	IP*		8.9	12/31/1995	12/31/1994	3/1/1995	53020	3630	95CW0134	David Furr
FURR POND NO 12	R	DRY FORK	70	NW	NE	SE	10	8	S	98	W	S	IP*		3.3	12/31/1995	12/31/1994	3/1/1995	53020	3631	95CW0134	David Furr
FURR POND NO 13	R	DRY FORK	70	SW	NE	SE	10	8	S	98	W	S	IP*		4	12/31/1995	12/31/1994	3/1/1995	53020	3632	95CW0134	David Furr
FURR POND NO 14	R	DRY FORK	70	NW	NE	SE	10	8	S	98	W	S	IP*		2.8	12/31/1995	12/31/1994	3/1/1995	53020	3633	95CW0134	David Furr
FURR POND NO 15	R	DRY FORK	70	SE	NE	SE	10	8	S	98	W	S	IP*		1.2	12/31/1995	12/31/1994	3/1/1995	53020	3634	95CW0134	David Furr
FURR POND NO 16	R	DRY FORK	70	SE	NE	SE	10	8	S	98	W	S	IP*		2.3	12/31/1995	12/31/1994	3/1/1995	53020	3635	95CW0134	David Furr
FURR POND NO 17	R	DRY FORK	70	SE	NE	SE	10	8	S	98	W	S	IP*		0.9	12/31/1995	12/31/1994	3/1/1995	53020	3636	95CW0134	David Furr
FURR POND NO 18	R	DRY FORK	70	SE	NE	SE	10	8	S	98	W	S	IP*		9	12/31/1995	12/31/1994	3/1/1995	53020	3637	95CW0134	David Furr
FURR POND NO 19	R	DRY FORK	70	SE	NE	SE	10	8	S	98	W	S	IP*		5.2	12/31/1995	12/31/1994	3/1/1995	53020	3638	95CW0134	David Furr
CNR POND NO 1	R	BRUSH CREEK	70	SW	SW	SE	11	6	S	99	W	S	RP*		2.4	12/31/2001	12/31/2000	6/15/2001	55318	3503	01CW0373	Colorado Nature Ranch LP
CNR POND NO 2	R	BRUSH CREEK	70	SW	SW	SE	11	6	S	99	W	S	RP*		2.4	12/31/2001	12/31/2000	6/15/2001	55318	3504	01CW0373	Colorado Nature Ranch LP
CNR POND NO 3	R	BRUSH CREEK	70	NW	SW	SE	11	6	S	99	W	S	RP*		5.6	12/31/2001	12/31/2000	6/15/2001	55318	3505	01CW0373	Colorado Nature Ranch LP
CNR POND NO 4	R	BRUSH CREEK	70	SE	SW	NW	11	6	S	99	W	S	RP*		5.6	12/31/2001	12/31/2000	6/15/2001	55318	3506	01CW0373	Colorado Nature Ranch LP
CNR POND NO 5	R	BRUSH CREEK	70	SE	NE	NE	10	6	S	99	W	S	RP*		8	12/31/2001	12/31/2000	6/15/2001	55318	3507	01CW0373	Colorado Nature Ranch LP
CNR POND NO 6	R	BRUSH CREEK	70	NW	SW	SE	3	6	S	99	W	S	RP*		8	12/31/2001	12/31/2000	6/15/2001	55318	3508	01CW0373	Colorado Nature Ranch LP

District 70
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
CNR POND NO 7	R	BRUSH CREEK	70	SE	SE	SW	31	5	S	99	W	S	RP*		8	12/31/2001	12/31/2000	6/15/2001	55318	3509	01CW0373	Colorado Nature Ranch LP
CNR POND NO 8	R	BRUSH CREEK	70	NE	SE	SW	31	5	S	99	W	S	RP*		8	12/31/2001	12/31/2000	6/15/2001	55318	3510	01CW0373	Colorado Nature Ranch LP
CNR POND NO 9	R	BRUSH CREEK	70	NE	SE	NE	36	5	S	99	W	S	RP*		4.1	12/31/2001	12/31/2000	6/15/2001	55318	3511	01CW0373	Colorado Nature Ranch LP
CNR POND NO 10	R	BRUSH CREEK	70	NE	SE	NE	36	5	S	99	W	S	RP*		1.12	12/31/2001	12/31/2000	6/15/2001	55318	3512	01CW0373	Colorado Nature Ranch LP
CNR RESERVOIR NO 1	R	BRUSH CREEK	70	NW	SE	SW	24	5	S	99	W	S	IR*		8	12/31/2001	12/31/2000	6/15/2001	55318	3513	01CW0373	Colorado Nature Ranch LP
CNR RESERVOIR NO 2	R	BRUSH CREEK	70	SE	NW	NE	14	5	S	99	W	S	IR*		8	12/31/2001	12/31/2000	6/15/2001	55318	3514	01CW0373	Colorado Nature Ranch LP
CNR POND NO 1	R	BRUSH CREEK	70	SW	SW	SE	11	6	S	99	W	S	RP*		14	12/31/2001	12/31/2000	8/28/2002	55757	3503	01CW0373	Colorado Nature Ranch LP
CNR POND NO 2	R	BRUSH CREEK	70	SW	SW	SE	11	6	S	99	W	S	RP*		24.6	12/31/2001	12/31/2000	8/28/2002	55757	3504	01CW0373	Colorado Nature Ranch LP
CNR POND NO 3	R	BRUSH CREEK	70	NW	SW	SE	11	6	S	99	W	S	RP*		8.4	12/31/2001	12/31/2000	8/28/2002	55757	3505	01CW0373	Colorado Nature Ranch LP
CNR POND NO 4	R	BRUSH CREEK	70	SE	SW	NW	11	6	S	99	W	S	RP*		10.8	12/31/2001	12/31/2000	8/28/2002	55757	3506	01CW0373	Colorado Nature Ranch LP
CNR POND NO 5	R	BRUSH CREEK	70	SE	NE	NE	10	6	S	99	W	S	RP*		14.7	12/31/2001	12/31/2000	8/28/2002	55757	3507	01CW0373	Colorado Nature Ranch LP
CNR POND NO 6	R	BRUSH CREEK	70	NW	SW	SE	3	6	S	99	W	S	RP*		21.74	12/31/2001	12/31/2000	8/28/2002	55757	3508	01CW0373	Colorado Nature Ranch LP
CNR POND NO 7	R	BRUSH CREEK	70	SE	SE	SW	31	5	S	99	W	S	RP*		8.4	12/31/2001	12/31/2000	8/28/2002	55757	3509	01CW0373	Colorado Nature Ranch LP
CNR POND NO 8	R	BRUSH CREEK	70	NE	SE	SW	31	5	S	99	W	S	RP*		3.9	12/31/2001	12/31/2000	8/28/2002	55757	3510	01CW0373	Colorado Nature Ranch LP
CNR RESERVOIR NO 2	R	BRUSH CREEK	70	SE	NW	NE	14	5	S	99	W	S	IR*		37	12/31/2001	12/31/2000	8/28/2002	55757	3514	01CW0373	Colorado Nature Ranch LP
MC KAY FORK POND	R	ROAN CREEK	70	SW	SW	NE	9	8	S	100	W	S	CP*		10.5	12/31/2003	12/31/2002	6/1/2000	55882.54939	3502	03CW0306	# 10 Enterprises LLC
CNR POND NO 6	R	BRUSH CREEK	70	NW	SW	SE	3	6	S	99	W	S	RP*		2	12/31/2001	12/31/2000	6/4/2003	56037	3508	01CW0373	Colorado Nature Ranch LP
ROAN CREEK RESERVOIR ENL	R	ROAN CREEK	70	NE	SE	SW	6	8	S	97	W	S	IM*			11/10/70	01/11/37	7/7/1961	40730	3611	191	CHEVRON TEXACO SHALE OIL CO
ROAN CREEK RESERVOIR ENL	R	ROAN CREEK	70	NE	SE	SW	6	8	S	97	W	S	IM*			11/10/70	01/11/37	3/2/1967	42794	3611	203	CHEVRON TEXACO SHALE OIL CO

Notes:
Highlighted rows indicate conditional water right may be used for energy development water demand
Data Sources Include - Colorado Decisions Support System (CDSS) Database, Hydrobase Colorado Division of Water Resources (DWR), and personal discussion with water commissioner

District 72
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township	Range	P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
BULL CREEK DITCH	D	BULL CREEK	72	NW	SW	SE	23	10 S	96 W	S	I	6.66	0.94	2/7/1890		12/31/1882	12053	558	37	LOUIS PALLAORO
JONES DITCH	D	KIMBALL CREEK	72	NW	SE	NW	1	9 S	95 W	S	I	2.825	2.12	2/7/1890		10/24/1884	12716	722	27	BARRY WEBER
MCKEE DITCH	D	KIMBALL CREEK	72	SE	SE	SE	11	9 S	95 W	S	ICP	1.474	0.306	2/7/1890		12/11/1885	13129	777	2	DAVE BRANT
COOK DITCH	D	KIMBALL CREEK	72	SE	SW	NE	14	9 S	95 W	S	I	1.96	0.89	2/7/1890		1/13/1886	13162	580	32	GARY HANSON
HALL DITCH (COTTONWOOD)	D	COTTONWOOD CREEK	72	SW	NE	SE	13	10 S	96 W	S	I	4.211	0.002	2/7/1890		12/5/1887	13853	656	49	Mike Currier
ARKANSAS DITCH	D	MESA CREEK	72		SE	NE	7	11 S	96 W	S	I	7.55	3.5	2/7/1890		6/27/1888	14058	514	56	Unknown
BERTHOLF LANHAM UPDIKE D	D	BIG CREEK	72	SE	SE	SE	14	10 S	95 W	S	I	13.16	6.562	2/7/1890		8/30/1888	14122	533	61	RANDY WALCK
COOK DITCH	D	KIMBALL CREEK	72	SE	SW	NE	14	9 S	95 W	S	I	3.492	0.588	2/7/1890		8/30/1888	14122	580	62	GARY HANSON
DUNLAP DITCH (HAWXHURST)	D	HAWXHURST CREEK	72	NW	NW	SW	17	9 S	94 W	S	I	2.88	1.42	2/7/1890		8/31/1888	14123	604	64	Les Hittle
JOHNSON AND STUART DITCH	D	BIG CREEK	72	NE	SE	NE	10	10 S	95 W	S	I	4.212	0.038	2/7/1890		9/26/1888	14149	721	73	JOHN JULIUS
BERTHOLF LANHAM UPDIKE D	D	BIG CREEK	72	SE	SE	SE	14	10 S	95 W	S	I	1.35	0.15	2/7/1890		12/7/1888	14221	533	82	RANDY WALCK
BULL CREEK DITCH	D	BULL CREEK	72	NW	SW	SE	23	10 S	96 W	S	I	1.89	1.89	6/1/1916	12/16/1912	8/29/1892	22995.15582	558	CA2635	LOUIS PALLAORO
COLORADO CANAL	D	BUZZARD CREEK	72	SE	NE	NW	20	9 S	94 W	S	I		117.5	6/1/1916	12/16/1912	6/15/1903	22995.19523	579	CA2635	UTE WATER CD - BATTLEMENT WCD
ATWELL WASTE SEEP DITCH	D	MESA CREEK	72	NW	NW	SW	20	10 S	96 W	S	I	0.3	0.06	6/1/1916	12/16/1912	5/1/1908	22995.21305	519	CA2635	UTE WATER CONSERVANCY DISTRICT
MASON GULCH DITCH	D	PLATEAU CREEK	72	NW	SE	NW	16	10 S	95 W	S	I	1.08	0.72	6/1/1916	12/16/1912	8/12/1908	22995.21408	767	CA2635	DAN SMITH
RUPERT SHOEMAKER DITCH	D	MESA CREEK	72	NE	SW	NE	30	10 S	96 W	S	I		0.36	6/1/1916	12/16/1912	5/1/1910	22995.22035	866	CA2635	MARVIN BARNES
BEAVER DITCH	D	MESA CREEK	72	SE	NW	SW	7	11 S	96 W	S	I	3.6	1.908	6/1/1916	12/16/1912	5/15/1913	23145	529	CA5812	R W BIESER
OAKLAND DITCH	D	BRUSH CREEK	72	SW	SW	NE	11	9 S	94 W	S	I	0.35	0.45	08/03/34	03/18/29	6/10/1888	28931.14041	811	84CW0218	GARY HANSON
LAST DOLLAR DITCH	D	BRUSH CREEK	72	SE	NE	SE	35	8 S	94 W	S	I	1.125	1.125	08/03/34	03/18/29	6/6/1906	28931.2061	739	CA5626	CRAIG MCDANIELS
SQUIER SEEPAGE D NO 2	D	COLORADO RIVER	72	NW	NE	NE	15	11 S	101 W	S	IRP	0.39	0.16	07/25/41	08/03/34	2/10/1923	30895.26703	890	CA5812	Fransis & Mary Jane Hutto
WHITE ELEPHANT DITCH	D	PLATEAU CREEK	72	NE	NW	SW	30	9 S	94 W	S	I	0.26	0.13	07/25/41	08/03/34	10/10/1931	30895.29867	936	CA5812	LELAND CLIFTON
RIVER BOTTOM DITCH	D	COLORADO RIVER	72	SE	NE	SE	7	1 S	2 E	U	I	0.21	0.91	07/25/41	08/03/34	4/1/1934	30895.30771	851	CA5812	NEIL GARD
MUENDERS DITCH	D	BULL CREEK	72	NE	SW	SW	5	11 S	95 W	S	I		0.01	07/25/41	08/03/34	5/15/1934	30895.30815	806	CA5812	Unknown
SPRING DITCH (PLATEAU)	D	PLATEAU CREEK	72	SW	SW	SE	6	10 S	95 W	S	I	0.39	0.26	07/25/41	08/03/34	3/1/1935	31105	886	CA5812	Ben E Nichols
J L FORD ARTESIAN WELL	W	COLORADO RIVER	72	NW	NE	NE	21	1 S	1 E	U	D	0.02	0.06	08/23/48	03/27/44	4/22/1938	34419.32253	5007	CA7327	Unknown
GRAND VIEW ARTESIAN NO 1	W	COLORADO RIVER	72	SE	NW	NW	29	1 S	1 W	U	D		0.027	08/23/48	03/27/44	6/1/1945	34850	5008	CA7327	Mike & Felicie Williams
SHERMAN ARTESIAN WELL	W	COLORADO RIVER	72	NE	NW	NW	25	1 S	1 W	U	D		0.044	08/23/48	03/27/44	6/15/1946	35229	5016	CA7327	GORDON & KATHY HOGGE
AMOS A BRUNER WELL	W	COLORADO RIVER	72	SE	SE	NW	22	1 S	1 W	U	D	0.008	0.063	08/23/48	03/27/44	1/7/1947	35435	5001	CA7327	M2P CAPITAL
GRAND JCT COLO R PL	P	COLORADO RIVER	72	SE	NE	NE	3	11 S	98 W	S	MND	18.57	81.43	07/21/59	03/27/44	2/17/1947	35476	644	CA8303	CITY OF GRAND JCT & CLIFTON WD
FLECK ARTESIAN WELL NO 2	W	WELLS	72	SW	NW	SW	22	1 S	1 W	U	D		0.044	08/23/48	03/27/44	4/24/1947	35542	5107	CA7327	Artesian Water Service
CITIES SERVICE PL AND PP	P	COLORADO RIVER	72	SE	SW	SE	28	8 S	97 W	S	IM*		100	11/10/70	01/11/37	8/2/1951	37103	1343	188	OXY USA INC
HARPER DITCH	D	REED WASH	72	NE	SE	NW	35	2 N	3 W	U	I	1.5	0.75	07/21/59	03/27/44	3/8/1952	37322	664	CA8303	RON FAUKLNER & BOB RAYMOND
GETTY PIPELINE	P	COLORADO RIVER	72	SE	SW	SE	28	8 S	97 W	S	IM*		56	11/10/66	09/05/52	9/3/1950	37503.3677	1365	306	CHEVRON TEXACO SHALE OIL CO
PACIFIC OIL CO PL NO 1	P	COLORADO RIVER	72	NE	SE	SE	28	8 S	97 W	S	MNO		57.25	11/10/70	01/11/37	6/9/1953	37780	1399	D70 189	Chevron Shale Oil
PACIFIC OIL CO PL NO 1	P	COLORADO RIVER	72	NW	SE	SE	28	8 S	97 W	S	IM*		114.5	11/10/70	01/11/37	6/9/1953	37780	1523	D70 189	Chevron Shale Oil
M L MOWRY SEEP & WASTE D	D	COLORADO RIVER	72	NE	SW	NW	18	1 S	1 W	U	I		0.25	07/21/59	03/27/44	2/1/1956	38747	796	CA8303	REDLANDS WATER & POWER CO
COLORADO CANAL	D	BUZZARD CREEK	72	SE	NW	NE	20	9 S	94 W	S	IM*		123	04/13/72	07/21/59	7/1/1952	40013.37437	1479	1007	UTE WATER CD - BATTLEMENT WCD
EPENETER PUMPING PLANT	P	COLORADO RIVER	72	NW	NW	SE	23	10 S	98 W	S	I	1.18	2.02	04/13/72	07/21/59	8/1/1958	40013.39659	1076	1020	COLORADO STATE PARKS
RICE PIPELINE	P	COLORADO RIVER	72	NW	SW	NW	2	1 S	2 E	U	IS		12	04/13/72	07/21/59	4/1/1959	40013.39902	1197	1023	FIVE R VENTURES LTD
UTE PUMPING STATION	P	COLORADO RIVER	72	SE	SE	NE	3	1 S	2 E	U	I		50	04/13/72	07/21/59	10/22/1962	41202	1235	1032	UTE WATER CONSY DIST
HARRISON CANAL	D	BUZZARD CREEK	72	NW	NW	NE	34	9 S	92 W	S	IM*		65	04/13/72	07/21/59	12/12/1963	41618	1113	1037	BATTLEMENT MESA CONSERV DIST
BRUSH CREEK CANAL	D	BUZZARD CREEK	72	SE	SE	NE	18	9 S	92 W	S	IM*		35	04/13/72	07/21/59	1/13/1964	41650	1031	1038	BATTLEMENT MESA CONSERV DIST
YOUNG WATER WELL	W	PLATEAU CREEK	72		SW	NE	35	9 S	95 W	S	D		10	04/13/72	07/21/59	4/14/1964	41742	5077	1040	RICHARD STITES
GARDNER DIVERSION NO 1	P	COLORADO RIVER	72	SW	NE	SW	15	1 S	1 W	U	IM*	6.53	8.47	04/13/72	07/21/59	6/2/1964	41791	1089	1042	CITY OF GRAND JUNCTION
MACK PUMPING PIPELINE	P	COLORADO RIVER	72	SW	SE	NW	8	10 S	103 W	S	MN*		150	04/13/72	07/21/59	5/20/1965	42143	1152	1053	CENTRAL APALACHIA MINING LLC
SKI PIPELINE DIVERSION	L	MESA CREEK	72	NW	SE	NE	30	11 S	96 W	S	IM*	0.1	0.4	04/13/72	07/21/59	6/15/1966	42534	1517	1054	POWDERHORN RESORT
LIME KILN DRAW SPRING	S	LIMEKILN CREEK	72	NE	NE	NW	35	11 S	101 W	S	IS		0.5	12/31/1970	12/31/1969	12/31/1963	43829.41637	1144	W0227	B JOHNSON
DIEMOZ DITCH	D	MESA CREEK	72	NW	SW	NW	20	10 S	96 W	S	ID		1	12/31/1971	12/31/1970	12/31/1888	44194.14245	1060	W0224	ERIK FULMER

District 72
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
SAND WASH DITCH	D	COLORADO RIVER	72	SW	NE	NW	9	9	S	97	W	S	IN	1	1	12/31/1971	12/31/1970	8/16/1971	44422	1203	W0458	MICHEL CARR
ASPEN PARK WELL	W	PLATEAU CREEK	72		SE	NE	5	10	S	93	W	S	MD	0.066	0.33	12/31/1972	12/31/1971	8/5/1963	44559.41489	5080	W1225	ASPEN PARK INC
BIG BEAVER DOM SYS PT 01	L	MESA CREEK	72		SW	SW	20	11	S	96	W	S	D		0.007	12/31/1972	12/31/1971	11/12/1971	44559.4451	1011	W0477	Steve Bailey
BIG BEAVER DOM SYS PT 02	L	MESA CREEK	72		SW	SW	20	11	S	96	W	S	D		0.004	12/31/1972	12/31/1971	11/12/1971	44559.4451	1458	W0477	Jack Treece
BIG BEAVER DOM SYS PT 03	L	MESA CREEK	72		NW	SW	20	11	S	96	W	S	D		0.007	12/31/1972	12/31/1971	11/12/1971	44559.4451	1459	W0477	Jack Treece
BIG BEAVER DOM SYS PT 04	L	MESA CREEK	72		NW	SW	20	11	S	96	W	S	D		0.004	12/31/1972	12/31/1971	11/12/1971	44559.4451	1460	W0477	Jack Treece
BIG BEAVER DOM SYS PT 05	L	MESA CREEK	72		NW	SW	20	11	S	96	W	S	D		0.006	12/31/1972	12/31/1971	11/12/1971	44559.4451	1461	W0477	Jack Treece
BIG BEAVER DOM SYS PT 06	L	MESA CREEK	72		SW	NW	20	11	S	96	W	S	D		0.005	12/31/1972	12/31/1971	11/12/1971	44559.4451	1462	W0477	Jack Treece
BIG BEAVER DOM SYS PT 07	L	MESA CREEK	72		NW	SW	20	11	S	96	W	S	D		0.003	12/31/1972	12/31/1971	11/12/1971	44559.4451	1463	W0477	Jack Treece
BIG BEAVER DOM SYS PT 08	L	MESA CREEK	72		NW	SW	20	11	S	96	W	S	D		0.004	12/31/1972	12/31/1971	11/12/1971	44559.4451	1464	W0477	Jack Treece
BIG BEAVER DOM SYS PT 09	L	MESA CREEK	72		SW	NW	20	11	S	96	W	S	D		0.005	12/31/1972	12/31/1971	11/12/1971	44559.4451	1465	W0477	Jack Treece
BIG BEAVER DOM SYS PT 10	L	MESA CREEK	72		SW	NW	20	11	S	96	W	S	D		0.007	12/31/1972	12/31/1971	11/12/1971	44559.4451	1466	W0477	Jack Treece
BIG BEAVER DOM SYS PT 11	L	MESA CREEK	72		SW	NW	20	11	S	96	W	S	D		0.002	12/31/1972	12/31/1971	11/12/1971	44559.4451	1467	W0477	Jack Treece
SILVER OPEN DITCH	D	COLORADO RIVER	72	SW	SE	NE	34	9	S	103	W	S	ID	0.36	0.4	12/31/1972	12/31/1971	3/1/1972	44620	1214	W0526	L C SILVER
MOODY WASTE DITCH	D	COLORADO RIVER	72	NE	NE	SW	32	1	N	1	W	U	I		0.5	12/31/1972	12/31/1971	6/15/1972	44726	1174	W1590	J L FITZGERALD
LONE SPRUCE SPRING	S	PLATEAU CREEK	72	SE	NW	SE	5	10	S	93	W	S	D		0.033	12/31/1972	12/31/1971	6/25/1972	44736	1147	W1633	JIM ROOKS
COLLBRAN MUN SPRING NO 1	S	PLATEAU CREEK	72	NE	SW	SW	25	9	S	95	W	S	MD		1.75	12/31/1972	12/31/1971	11/1/1972	44865	1057	W1729	Town of Collbran
MCNEESE PUMP & PIPELINE	L	COLORADO RIVER	72	SE	NE	SE	4	1	S	2	E	U	IS		0.56	12/31/1973	12/31/1972	3/1/1972	44925.4462	1163	W1813	L W MCNEESE
FUQUA PIPELINE NO 1	L	COLORADO RIVER	72	SE	NW	SE	7	1	S	1	W	U	IRS		0.25	12/31/1973	12/31/1972	6/30/1972	44925.44741	1086	W1792	Bluffs West estates HOA
BRAY DITCH	D	REED WASH	72	NW	NW	NE	2	1	N	3	W	U	I		0.2	12/31/1973	12/31/1972	8/10/1973	45147	1436	W2058	JOE BRAY
GARDNER DIVERSION NO 1	P	COLORADO RIVER	72	SW	NE	SW	15	1	S	1	W	U	IM*		10	12/31/1973	12/31/1972	9/6/1973	45174	1089	W2155	CITY OF GRAND JUNCTION
MONUMENT CANYON PMP PROJ	P	COLORADO RIVER	72	SW	SW	SW	35	1	N	2	W	U	I		2	12/31/1973	12/31/1972	11/12/1973	45241	1173	W2131	D C MULAY
DILLARD DITCH AND PUMP 2	P	COLORADO RIVER	72	NW	NE	SE	22	1	S	1	E	U	IM*	0.25	0.25	12/31/1974	12/31/1973	12/31/1936	45290.31776	1062	W2311	V Dillard
NORRELL DITCH	D	GROVE CREEK	72	SE	NW	NW	18	10	S	94	W	S	I	0.5	1.5	12/31/1974	12/31/1973	5/1/1941	45290.33358	1181	W2461	ANNIE ANDERSON
DUPONT PUMP	P	COLORADO RIVER	72	SE	NW	NE	27	1	N	2	W	U	I		1	12/31/1974	12/31/1973	10/11/1973	45290.45209	1070	W2259	RIVERBEND RANCH
DEER SPRINGS DITCH	S	PLATEAU CREEK	72	SW	NW	NW	36	10	S	96	W	S	PDS		0.033	12/31/1974	12/31/1973	12/1/1973	45290.4526	1059	W2250	RALPH STUART
GROUSE SPRING	S	PLATEAU CREEK	72		NW	NW	36	10	S	96	W	S	DS		0.033	12/31/1974	12/31/1973	12/1/1973	45290.4526	1106	W2252	RALPH STUART
TURKEY SPRING	S	BULL CREEK	72	SE	NW	NW	36	10	S	96	W	S	IDS		0.033	12/31/1974	12/31/1973	12/1/1973	45290.4526	1230	W2251	RALPH STUART
CLYMER PUMP & PL NO 1	P	COLORADO RIVER	72	NW	NE	SW	30	1	S	1	E	U	I		0.93	12/31/1974	12/31/1973	2/5/1974	45326	1052	W2374	Clymer Ranch
NATION PUMP NO 1	P	COLORADO RIVER	72	SE	NW	SE	15	11	S	101	W	S	I		0.5	12/31/1974	12/31/1973	3/1/1974	45350	1177	W2282	J C Nation
NATION PUMP NO 2	P	COLORADO RIVER	72	SE	NW	SE	15	11	S	101	W	S	I		0.5	12/31/1974	12/31/1973	3/1/1974	45350	1178	W2282	J C Nation
BARR WASH DITCH	D	COLORADO RIVER	72	SW	NW	NE	18	2	N	3	W	U	I	2	10	12/31/1974	12/31/1973	6/1/1974	45442	1003	W2308	HARRY LEWALLEEN
CLYMER PUMP & PL NO 2	P	COLORADO RIVER	72	NE	SE	SW	30	1	S	1	E	U	I		4.15	12/31/1974	12/31/1973	6/6/1974	45447	1053	W2375	Clymer Ranch
FLETCHER DIVERSION	P	COLORADO RIVER	72	NE	SE	NE	29	1	N	2	W	U	IM*		6	12/31/1975	12/31/1974	6/1/1973	45655.45077	1081	W2633	A&G PARTNERSHIP
C M C NO 1 STATION	M	COLORADO RIVER	72	SW	NE	NE	34	10	S	98	W	S	INF	1.2	1.2	12/31/1975	12/31/1974	8/1/1973	45655.45138	1055	W2617	Cambridge Corp
HARRIS PUMP AND PIPELINE	P	COLORADO RIVER	72	SE	SW	SE	8	2	N	2	W	U	I		4	12/31/1975	12/31/1974	11/20/1974	45655.45614	1111	W2614	LEROY HARRIS
T J B PUMPS PIPELINES D	DLP	EAST SALT CREEK	72	NE	NE	NW	6	2	N	3	W	U	I	2.02	1.59	12/31/1975	12/31/1974	4/1/1975	45746	1232	W2769	FEDERAL LAND BANK
HILL GROVE CR DIVERSION	D	GROVE CREEK	72	SE	NE	SE	35	9	S	95	W	S	I		1	12/31/1975	12/31/1974	5/29/1975	45804	1121	W2737	Fred Grimes
MATCHETT PUMP STATION	L	COLORADO RIVER	72	NW	SW	SE	6	1	S	1	E	U	I		3	12/31/1975	12/31/1974	6/1/1975	45807	1157	W2784	K M MATCHETT
ELDERKIN PUMP & PIPELINE	P	COLORADO RIVER	72	NW	NE	SE	7	1	S	1	W	U	I		1	12/31/1975	12/31/1974	6/20/1975	45826	1074	W2730	R L ELDERKIN
BEEHIVE SPRING NO 2	S	SPRING CREEK	72		NW	SE	28	10	S	96	W	S	ID		0.048	12/31/1975	12/31/1974	8/5/1975	45872	1006	W2853	Bill Law
BIESER PIPELINE	L	MESA CREEK	72	SW	NE	NW	29	11	S	96	W	S	IPD		0.49	12/31/1976	12/31/1975	7/18/1975	46020.45854	1010	W2916	ROBERT BIESER & POWDER RIDGE D
CURRIER BADGER WASH PUMP	P	WEST SALT CREEK	72	SW	NW	NE	19	9	S	103	W	S	IR*		5	12/31/1976	12/31/1975	12/17/1976	46372	1262	W3287	DON KERNS
GR JCT 22 RD PMP DVR STA	P	COLORADO RIVER	72	SE	NE	SW	36	1	N	2	W	U	IMD	1.5	38.5	12/31/1977	12/31/1976	7/1/1976	46386.46203	1367	W3681	CITY OF GRAND JUNCTION
OBERGFELL DIVERSION	P	COLORADO RIVER	72	SW	SW	NW	2	1	S	1	E	U	IM*	2	18	12/31/1977	12/31/1976	2/28/1977	46445	1313	86CW0011	SOMBRE EL RIO HOME OWNERS ASSC
FRUITA PUMP STATION	P	COLORADO RIVER	72	NW	NW	NE	29	1	N	2	W	U	IM*	0.6	24.4	12/31/1977	12/31/1976	5/15/1977	46521	1364	W3551	CITY OF FRUITA
GRAND JCT-REDLANDS TAIL	P	COLORADO RIVER	72	SW	NE	SE	16	1	S	1	W	U	IM*	18	32	12/31/1977	12/31/1976	6/1/1977	46538	1368	W3683	CITY OF GRAND JUNCTION
HUFFAKER DITCH	D	COLORADO RIVER	72	NE	SE	NE	17	1	S	1	W	U	IPS		0.1	12/31/1977	12/31/1976	6/10/1977	46547	1372	W3464	R C HUFFAKER

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
ADAMS PIT NO 512 PUMP ST	P	COLORADO RIVER	72	SE	NE	NW	16	1	S	1	W	U	IN*	3	2	12/31/1978	12/31/1977	10/3/1977	46751.46662	1289	W3911	Whitewater Building Materials
GRUBBS SEEPAGE SPRINGS	S	MESA CREEK	72	SE	NE	SE	18	10	S	96	W	S	IDS	0.022	0.045	12/31/1978	12/31/1977	3/15/1978	46825	5094	82CW0222	COLEMAN GRUBBS
DAVID AND DARREN SPRING	S	MESA CREEK	72	NE	NE	SE	18	10	S	96	W	S	IDS	0.011	0.016	12/31/1978	12/31/1977	3/15/1978	46825	5095	82CW0222	COLEMAN GRUBBS
MONUMENT VILL IRR SYS PL	P	LIMEKILN CREEK	72	NE	NW	NE	23	11	S	101	W	S	I		0.97	12/31/1978	12/31/1977	4/26/1978	46867	1324	W3553	SURF VIEW DEVEL, DAVE FLETCHER
COON CREEK PIPELINE	L	COON CREEK	72	NW	NW	NE	20	10	S	96	W	S	IM*	4.1	0.4	12/31/1978	12/31/1977	9/1/1978	46995	1339	83CW0239	UTE WATER CONSY DIST
PAULL DITCH NO 1	D	LITTLE SALT WASH	72	SE	NE	SW	17	2	N	3	W	U	IFS		1.75	12/31/1978	12/31/1977	9/1/1978	46995	1378	W3897	G A Reid
DEVILS CANYON PUMP NO 1	P	COLORADO RIVER	72	SE	SE	SW	18	1	N	2	W	U	IC*	4	7	12/31/1979	12/31/1978	3/30/1979	47205	1352	79CW0083	BLM
DORCHESTER COLOMINE PL 1	L	BIG SALT WASH	72	SE	NE	SW	29	2	N	2	W	U	IC*		20	12/31/1979	12/31/1978	12/7/1979	47457	1355	79CW0325	American Shield Coal
DORCHESTER COLOMINE PL 3	L	COLORADO RIVER	72	SE	NW	SW	18	1	N	2	W	U	IC*		10	12/31/1980	12/31/1979	12/26/1979	47481.47476	1357	80CW0005	American Shield Coal
COLORADO R PUMP STA NO 1	P	COLORADO RIVER	72	NW	NW	NE	7	10	S	103	W	S	IN*		60	12/31/1980	12/31/1979	7/18/1980	47681	981	80CW0386	TRI-STATE GENERATION
SALT CREEK PUMP STATION	P	LITTLE SALT WASH	72	NW	NW	NE	4	10	S	103	W	S	IN*		60	12/31/1980	12/31/1979	7/18/1980	47681	982	80CW0385	TRI-STATE GENERATION
POWDERHORN SNOWMAKG DIVR	L	MESA CREEK	72	NW	SE	NE	30	11	S	96	W	S	K	1	2	12/31/1981	12/31/1980	11/1/1976	47847.46326	1411	81CW0412	POWDERHORN METRO DISTRICT II
COPELAND PMPG PLT NO 1	P	COLORADO RIVER	72	NW	NW	SE	16	11	S	101	W	S	IRS		0.1	12/31/1981	12/31/1980	4/15/1981	47952	1340	81CW0317	Larry Copeland
BRIDGES SWITCH PUMP PL	P	COLORADO RIVER	72	NW	NW	SW	8	1	S	2	E	U	IM*		30	12/31/1981	12/31/1980	6/2/1981	48000	1027	81CW0222	ORCHARD MESA IRR DST
PARADISE HILLS PIPELINE	L	COLORADO RIVER	72	NW	NW	SE	26	1	N	1	W	U	I		0.208	12/31/1982	12/31/1981	7/7/1982	48400	1318	82CW0306	PARADISE HILLS HOA
PEACOCK DRAIN PUMP	P	WEST SALT CREEK	72	SE	SW	SE	7	9	S	103	W	S	I		0.42	12/31/1982	12/31/1981	9/2/1982	48457	1306	82CW0229	DONALD K PEACOCK
WILDCAT DITCH	D	COON CREEK	72	SE	NE	SW	17	10	S	96	W	S	IM*		1.5	12/31/1983	12/31/1982	9/1/1978	48577.46995	939	83CW0223	UTE WATER CONSERVANCY DISTRICT
COON CREEK PIPELINE	L	COON CREEK	72	NW	NW	NE	20	10	S	96	W	S	IM*		1.5	12/31/1983	12/31/1982	9/1/1978	48577.46995	1339	83CW0223	UTE WATER CONSY DIST
PEACH QUEEN POWER CANAL	Z	COLORADO RIVER	72	SE	NE	NE	3	11	S	98	W	S	p		2077	12/31/1983	12/31/1982	12/20/1980	48577.47836	1420	83CW0076	HYDRO-WEST INC
BLUEGRASS PUMPING P & PL	P	COLORADO RIVER	72	SE	NE	SW	27	1	N	1	W	U	I		2	12/31/1983	12/31/1982	5/15/1983	48712	1406	83CW0237	EDWARD CURRIER
MAD DOG PIPELINE DIVR	L	MESA CREEK	72	NW	NW	SE	30	11	S	96	W	S	IM*		2.75	12/31/1984	12/31/1983	11/30/1976	48942.46355	1416	84CW0461	POWDERHORN METRO DISTRICT II
NORTH MAD DOG SPRING	S	MESA CREEK	72	SE	SW	NE	30	11	S	96	W	S	IM*	0.25	2.75	12/31/1984	12/31/1983	11/30/1976	48942.46355	5227	88CW0059	POWDERHORN METRO DISTRICT II
PICKET PASS SPRING NO 1	S	MESA CREEK	72	SW	SW	NW	31	11	S	96	W	S	IM*		0.2	12/31/1984	12/31/1983	2/5/1979	48942.47152	5174	84CW0459	MESA SKI CORPORATION
PICKET PASS SPRING NO 2	S	MESA CREEK	72	SW	SW	NW	31	11	S	96	W	S	IM*		0.6	12/31/1984	12/31/1983	2/5/1979	48942.47152	5177	84CW0464	MESA SKI CORPORATION
PICKET PASS SPRING NO 3	S	MESA CREEK	72	SW	SW	NW	31	11	S	96	W	S	IM*		0.6	12/31/1984	12/31/1983	2/5/1979	48942.47152	5178	84CW0465	MESA SKI CORPORATION
BILLS RUN SPRING	S	MESA CREEK	72	NW	SE	NW	32	11	S	96	W	S	IM*		0.2	12/31/1984	12/31/1983	2/5/1979	48942.47152	5181	84CW0463	MESA SKI CORPORATION
POWDERHORN WELL NO 1	W	MESA CREEK	72	SW	SE	SW	20	11	S	96	W	S	IM*		0.222	12/31/1984	12/31/1983	8/13/1984	49168	5244	84CW0458	Powderhorn Rec & Dev Co
POWDERHORN WELL NO 2	W	MESA CREEK	72	SE	SW	SW	20	11	S	96	W	S	IM*		0.222	12/31/1984	12/31/1983	8/13/1984	49168	5245	84CW0460	Powderhorn Rec & Dev Co
DUDE SPRING	S	MESA CREEK	72	SE	NW	SE	30	11	S	96	W	S	IM*		0.2	12/31/1984	12/31/1983	9/10/1984	49196	5180	84CW0462	MESA SKI CORPORATION
PICKET PASS SPRING NO 4	S	MESA CREEK	72	NW	NW	NW	31	11	S	96	W	S	IM*		0.2	12/31/1984	12/31/1983	9/28/1984	49214	5179	84CW0466	MESA SKI CORPORATION
SPRUCE POINT PIPELINE	L	MESA CREEK	72	SW	NE	NW	27	11	S	96	W	S	IM*		3	12/31/1986	12/31/1985	10/9/1984	49673.49225	1434	86CW0015	POWDERHORN RESORT CORPORATION
LITTLE BEAVER PIPELINE 1	L	MESA CREEK	72	SW	SE	SW	19	11	S	96	W	S	IM*		0.5	12/31/1986	12/31/1985	1/23/1986	49696	1428	86CW0015	Powderhorn Resort
LITTLE BEAVER PIPELINE 2	L	MESA CREEK	72	SW	SW	SE	19	11	S	96	W	S	IM*		1	12/31/1986	12/31/1985	1/23/1986	49696	1429	86CW0015	Powderhorn Resort
LITTLE BEAVER PIPELINE 3	L	MESA CREEK	72	SE	SW	SE	19	11	S	96	W	S	IM*		0.5	12/31/1986	12/31/1985	1/23/1986	49696	1430	86CW0015	Powderhorn Resort
WEST BRANCH PIPELINE	L	MESA CREEK	72	SE	SE	SE	19	11	S	96	W	S	IM*		1	12/31/1986	12/31/1985	1/23/1986	49696	1431	86CW0015	POWDERHORN RESORT
CONFLUENCE PIPELINE	L	MESA CREEK	72	SW	SW	SW	20	11	S	96	W	S	IM*		1	12/31/1986	12/31/1985	1/23/1986	49696	1432	86CW0015	POWDERHORN RESORT CORPORATION
MIDDLE BRANCH PIPELINE	L	MESA CREEK	72	SE	SW	SW	20	11	S	96	W	S	IM*	0.09	0.91	12/31/1986	12/31/1985	1/23/1986	49696	1433	86CW0015	POWDERHORN RESORT
MORMON MESA DITCH	D	COTTONWOOD CREEK	72	NE	SE	NW	3	10	S	95	W	S	I	1.41	2.57	12/31/1987	12/31/1986	12/4/1984	50038.49281	799	91CW0163	MORMON MESA DITCH CO
RESERVOIR SPRING DITCH	D	RAPID CREEK	72	SW	NE	NW	29	11	S	97	W	S	IDO		5	12/31/1987	12/31/1986	4/24/1987	50152	849	87CW0116	TOWN OF PALISADE
WATSON CREEK DITCH	D	WATSON CREEK	72	SE	SW	NE	25	11	S	98	W	S	IDO		8	12/31/1987	12/31/1986	4/24/1987	50152	1497	87CW0115	CARR CREEK RANCHES INC
KRAMER SPRING	S	KIMBALL CREEK	72					9	S	95	W	S	IPD		0.022	12/31/1987	12/31/1986	9/15/1987	50296	5223	87CW0223	RICK TURLEY
WEIMER DITCH	D	MESA CREEK	72	SE	NW	SE	21	11	S	96	W	S	IC*		2.5	12/31/1988	12/31/1987	3/15/1988	50478	931	88CW0384	D HOOVER &ASSOC INVESTMENT INC
MESA CREEK PIPELINE	L	MESA CREEK	72	NW	SW	SE	16	11	S	96	W	S	IM*		3	12/31/1988	12/31/1987	6/9/1988	50564	1532	88CW0342	POWDERHORN METRO DISTRICT II
PALISADE WW TRMT OUTFALL	L	COLORADO RIVER	72	NE	NE	SW	3	1	S	2	E	U	IM*		1.9	12/31/1988	12/31/1987	6/14/1988	50569	1575	88CW0285	TOWN OF PALISADE
PALISADE TWN SEEPGE DIVR	D	COLORADO RIVER	72	SE	SE	NW	4	1	S	2	E	U	M		1.9	12/31/1988	12/31/1987	6/14/1988	50569	1576	88CW0285	TOWN OF PALISADE C/O ALAN KOCH
TEAGUE DITCH	D	MIDDLETON CREEK	72	NE	NE	SE	21	8	S	93	W	S	I		1.5	12/31/1988	12/31/1987	10/28/1988	50705	910	88CW0360	SHIRLEY GALLOWAY AND SONS
STITES DITCH	D	BIG CREEK	72	NW	SE	SW	3	10	S	95	W	S	I		1.35	12/31/1990	12/31/1989	7/1/1967	51134.42915	898	90CW0085	JOHN JULIUS
HALLER/ROZMAN DIV BEAVER	D	COLORADO RIVER	72	NW	SW	NE	28	1	S	1	E	U	I		5.64	12/31/1990	12/31/1989	10/27/1990	51434	964	90CW0255	EDWARD ROZMAN

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township	Range	P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
FRY DIVERSION NO 2	D	COLORADO RIVER	72	NW	NW	NW	12	1 N	2 W	U	IS	0.75	1.25	12/31/1990	12/31/1989	11/30/1990	51468	1544	90CW0256	Jack & Frank Fry
FRY DIVERSION NO 3	D	COLORADO RIVER	72	SE	NE	SE	12	1 N	2 W	U	S		0.2	12/31/1990	12/31/1989	11/30/1990	51468	1545	90CW0256	Jack & Frank Fry
FRY DIVERSION NO 4	D	COLORADO RIVER	72	NE	SE	NE	11	1 N	2 W	U	IS	0.75	1.25	12/31/1990	12/31/1989	11/30/1990	51468	1546	90CW0256	Jack & Frank Fry
FRY DIVERSION NO 5	D	COLORADO RIVER	72	NE	NE	NW	11	1 N	2 W	U	IS	0.75	1.25	12/31/1990	12/31/1989	11/30/1990	51468	1547	90CW0256	Jack & Frank Fry
S M WACHLER SEEP DITCH 1	D	PLATEAU CREEK	72	SW	SE	NE	20	9 S	94 W	S	I	0.5	1	12/31/1991	12/31/1990	6/1/1957	51499.39233	1584	91CW0175	GARY HANSON
NICHOLS SPRING NO 1	S	BUZZARD CREEK	72	NW	NW	NE	18	9 S	92 W	S	IDS		0.1	12/31/1992	12/31/1991	6/15/1991	51864.51665	5226	92CW0315	Curry, Anitia & Raymond
LYN SUBDIVISION STATION	P	COLORADO RIVER	72	SE	NW	SW	30	1 N	1 W	U	I	0.3	0.5	12/31/1992	12/31/1991	3/1/1992	51925	1270	92CW0314	LYN SUBDIVISION HOA
WANDAS WASH PUMP	P	COLORADO RIVER	72	SW	NE	SE	21	1 S	1 E	U	IN*	0.041	5.959	12/31/1992	12/31/1991	3/15/1992	51939	1274	92CW0301	A&G PARTNERSHIP & T Z RANCH
JOHNSON SPRING	S	COLORADO RIVER	72	NE	SE	NW	8	1 S	2 E	U	IS		0.033	12/31/1992	12/31/1991	6/1/1992	52017	5182	92CW0273	WILLIAM C JOHNSON
Y T RESERVOIR DITCH	D	GROVE CREEK	72	NE	NE	NW	21	10 S	94 W	S	A		5.33	12/31/1992	12/31/1991	6/2/1992	52018	951	92CW0271	LARAMIE ENERGY
FOWLER DIVERSION	P	COLORADO RIVER	72	SW	SE	NW	36	1 N	2 W	U	I		0.5	12/31/1993	12/31/1992	8/1/1992	52230.52078	1565	93CW0021	RICHARD KEDROWSKI
GVIC 13 ROAD DRAIN LINE	D	REED WASH	72	NW	NW	SW	15	2 N	3 W	U	I		5	12/31/1993	12/31/1992	2/4/1993	52265	1269	93CW0025	Grand Valley Irrigation Comp
MUNKRES PUMP	P	COLORADO RIVER	72	SE	NW	SE	7	1 S	1 W	U	I		0.078	12/31/1993	12/31/1992	5/28/1993	52378	1571	93CW0145	PINE TERRACE CT HOME ASSOC
VAUGHN DITCH HDG NO 1	D	COLORADO RIVER	72	SE	NE	NE	4	9 S	97 W	S	IS		1	12/31/1993	12/31/1992	11/10/1993	52544	1282	93CW0273	James V Vaughn
LEBERER INLET	D	COLORADO RIVER	72	SW	NW	SW	2	11 S	98 W	S	RPS		0.036	12/31/1994	12/31/1993	2/10/1994	52636	1401	94CW0038	CHARLENE LEBERER
EAST SALT CREEK PUMP NO2	P	EAST SALT CREEK	72	NW	SW	NE	10	9 S	103 W	S	I		1	12/31/1994	12/31/1993	2/14/1994	52640	1473	94CW0044	RON WALLACE
PERSIGO WASH	D	COLORADO RIVER	72	SE	NE	SW	9	1 N	1 W	U	I		1	12/31/1994	12/31/1993	3/1/1994	52655	1475	94CW0206	THOMAS A CRONK
MILLER PUMP	P	REED WASH	72	SE	NE	SE	34	2 N	3 W	U	IS		0.1	12/31/1994	12/31/1993	4/26/1994	52711	1407	94CW0090	ALVIN MILLER
CONNECTED LAKE	WR	COLORADO RIVER	72	NE	NW	SE	8	1 S	1 W	U	IR*	0.11	0.45	12/31/1995	12/31/1994	4/25/1991	52960.51614	5360	95CW0312	COLORADO STATE PARKS
ENDANGERED SPECIES LAKE	WR	COLORADO RIVER	72	NW	NW	SE	8	1 S	1 W	U	IR*		0.11	12/31/1995	12/31/1994	4/25/1991	52960.51614	5361	95CW0312	COLORADO STATE PARKS
HILGENFELD WW D HDGT 1	D	PLATEAU CREEK	72	SE	SE	NW	14	10 S	96 W	S	I		0.2	12/31/1995	12/31/1994	11/16/1994	52960.52915	772	95CW0019	Chris Eddy
BROOK SPRING	S	TATE CREEK	72	SW	NE	SW	30	10 S	96 W	S	IP*		0.5	12/31/1995	12/31/1994	2/13/1995	53004	984	95CW0345	DEL DAWSON
ROOTS DIVERSION NO 1	D	MACK WASH	72	SE	SE	NE	19	2 N	3 W	U	I		4	12/31/1995	12/31/1994	2/17/1995	53008	913	95CW0028	Greg Hoskin & Alan Reid
SUNSET DITCH (GROVE CR)	D	GROVE CREEK	72	NE	SE	SE	21	10 S	94 W	S	RP*		2	12/31/1995	12/31/1994	9/8/1995	53211	904	95CW0306	ROSEMARIE GLAS
SWANSON DITCH	D	GROVE CREEK	72	NE	SW	SW	21	10 S	94 W	S	RP*		2	12/31/1995	12/31/1994	9/8/1995	53211	1598	95CW0306	ROSEMARIE GLAS
SPRUCE MEADOW DITCH	D	GROVE CREEK	72	NW	NW	SE	21	10 S	94 W	S	RP*		2	12/31/1995	12/31/1994	9/8/1995	53211	1599	95CW0306	ROSEMARIE GLAS
BIG SLIDE SPRING	S	GROVE CREEK	72	NE	NE	NE	28	10 S	94 W	S	RP*		0.3	12/31/1995	12/31/1994	9/8/1995	53211	1605	95CW0306	ROSEMARIE GLAS
DEAD ASPEN PARK SPRING	S	GROVE CREEK	72	NE	SW	SW	21	10 S	94 W	S	RP*		0.1	12/31/1995	12/31/1994	9/8/1995	53211	1606	95CW0306	ROSEMARIE GLAS
FALLING CABIN SPRING NO1	S	GROVE CREEK	72	NE	NW	SE	20	10 S	94 W	S	RP*		0.1	12/31/1995	12/31/1994	9/8/1995	53211	1611	95CW0306	ROSEMARIE GLAS
FALLING CABIN SPRING NO2	S	GROVE CREEK	72	NE	NW	SE	20	10 S	94 W	S	RP*		0.1	12/31/1995	12/31/1994	9/8/1995	53211	1612	95CW0306	ROSEMARIE GLAS
KELLY SPRING	S	GROVE CREEK	72	SW	SW	NE	20	10 S	94 W	S	RP*		0.2	12/31/1995	12/31/1994	9/8/1995	53211	1613	95CW0306	ROSEMARIE GLAS
ANDY'S MEADOW SPRING	S	GROVE CREEK	72	SE	SE	NE	28	10 S	94 W	S	RP*		0.05	12/31/1995	12/31/1994	9/8/1995	53211	5363	95CW0306	ROSEMARIE GLAS
LOST 40 SPRING	S	GROVE CREEK	72	SW	NE	NW	27	10 S	94 W	S	RP*		0.05	12/31/1995	12/31/1994	9/8/1995	53211	5364	95CW0306	ROSEMARIE GLAS
27 ROAD WASTE DITCH	D	COLORADO RIVER	72	NW	NW	NW	1	1 S	1 W	U	I		0.07	12/31/1995	12/31/1994	9/10/1995	53213	975	95CW0189	Dennis L Granum
VAN WAGNER LAKE WELL	WR	COLORADO RIVER	72	SW	SE	SW	20	1 S	1 E	U	IR*		0.33	12/31/1995	12/31/1994	10/20/1995	53253	5250	95CW0312	WHITEWTER BLDG/COLO STATE PARK
CLIFTON SAN D EAST DISCH	D	COLORADO RIVER	72	SE	NE	SE	14	1 S	1 E	U	M		2.86	12/31/1996	12/31/1995	2/9/1996	53365	500	96CW0067	CLIFTON SAN DIST #2
TAYLOR NO 2 DITCH	D	WEST SALT CREEK	72		NE	NE	36	5 S	103 W	S	IS		0.5	12/31/1996	12/31/1995	3/19/1996	53404	1477	96CW0082	3X Ranch
FELLHAUER NO 1 PUMP SITE	P	COLORADO RIVER	72	SW	SW	SW	15	11 S	101 W	S	IW	0.44	0.56	12/31/1996	12/31/1995	8/1/1996	53539	1617	96CW0216	Jay S Fellhauer
IVS NO 1 SYSTEM POINT A	P	COLORADO RIVER	72	NE	SW	SW	35	1 N	2 W	U	IS		1.5	12/31/1996	12/31/1995	8/2/1996	53540	1619	96CW0227	Independence Valley HOA
THREE SISTER'S DIVERSION	D	COLORADO RIVER	72	SE	SE	NE	21	1 S	1 W	U	IF*	0.5	1.72	12/31/1997	12/31/1996	5/10/1993	53691.5236	1665	97CW0127	KERN H COPELAND
VERNE A JONES D HGT NO 1	D	RAPID CREEK	72	SW	NE	SE	19	11 S	97 W	S	IDO		5	12/31/1998	12/31/1997	4/24/1987	54056.50152	724	98CW0113	CARR CREEK RANCHES INC
VERNE A JONES D HGT NO 2	D	WATSON CREEK	72	SE	SW	NW	25	11 S	98 W	S	ID		8	12/31/1998	12/31/1997	4/24/1987	54056.50152	1514	98CW0113	CARR CREEK RANCHES INC
SHIRLEN PUMP	P	COLORADO RIVER	72	NW	SE	NW	24	1 S	1 E	U	S		0.25	12/31/1998	12/31/1997	3/30/1993	54056.52319	1663	98CW0235	LOUIS V SHIRLEN
3X BADGER WASH PUMP NO 1	P	WEST SALT CREEK	72	NW	SE	NW	7	9 S	103 W	S	ISW		0.25	12/31/1998	12/31/1997	6/15/1994	54056.52761	1637	98CW0232	Dave Farny
3X BADGER WASH PUMP NO 2	P	WEST SALT CREEK	72	SW	SE	NW	7	9 S	103 W	S	ISW		0.25	12/31/1998	12/31/1997	6/15/1994	54056.52761	1638	98CW0232	Dave Farny
3X BADGER WASH PUMP NO 3	P	WEST SALT CREEK	72	NE	SW	SW	7	9 S	103 W	S	ISW		0.25	12/31/1998	12/31/1997	6/15/1994	54056.52761	1639	98CW0232	Dave Farny
610 RESERVOIR PUMP & PL	P	WEST SALT CREEK	72	SW	SW	SW	7	9 S	103 W	S	ISW		0.25	12/31/1998	12/31/1997	6/15/1994	54056.52761	1640	98CW0232	Dave Farny
PARADISE HILLS PL NO. 2	L	COLORADO RIVER	72	SE	SE	NE	26	1 N	1 W	U	I	0.25	0.25	12/31/1998	12/31/1997	5/15/1997	54056.53826	1659	98CW0244	Bray and Company

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
DEATON FDR DITCH ALT. #1	P	EAST SALT CREEK	72	SE	NW	NE	22	9	S	103	W	S	IFW		0.75	12/31/1998	12/31/1997	2/4/1998	54091	1633	98CW0011	Gil Angelotti
DEATON FDR DITCH ALT. #2	P	EAST SALT CREEK	72	SW	SW	NE	22	9	S	103	W	S	IFW		0.75	12/31/1998	12/31/1997	2/4/1998	54091	1634	98CW0011	Gil Angelotti
POLAND SPRING	S	COLORADO RIVER	72	NE	NE	NW	3	1	N	1	E	U	IDS		0.02	12/31/1998	12/31/1997	4/27/1998	54173	5378	98CW0074	JAMES (ROCKIE) WOOTTEN
ARCHULETA DIVERSION	P	COLORADO RIVER	72	NE	SE	NE	23	1	S	1	E	U	IR*		1	12/31/1998	12/31/1997	5/2/1998	54178	1666	98CW0109	BONNIE BROOK VINEYARDS HOA
A AND G PUMP	P	COLORADO RIVER	72	SW	SW	NW	28	1	N	2	W	U	RP*		2	12/31/1998	12/31/1997	5/20/1998	54196	1643	98CW0192	Whitewater Building Materials
BROKEN ARROW SALT CR PL	P	EAST SALT CREEK	72	NW	NE	NW	22	9	S	103	W	S	IS		0.35	12/31/1998	12/31/1997	6/4/1998	54211	1632	98CW0185	EDMUND & MARY CARDOZA
VANDEGRIFT SPRING NO. 1	S	KIMBALL CREEK	72	SW	SE	NE	2	9	S	95	W	S	ID*		0.033	12/31/1998	12/31/1997	8/7/1998	54275	5375	98CW0136	Karen Lively
VANDEGRIFT SPRING NO. 2	S	KIMBALL CREEK	72	NW	SE	NE	2	9	S	95	W	S	ID*		0.033	12/31/1996	12/31/1995	8/7/1998	54275	5376	98CW0136	Karen Lively
CAMP KIWANIS WELL	W	MESA CREEK	72	SW	SE	SW	22	11	S	96	W	S	IC*		0.038	12/31/1998	12/31/1997	8/15/1998	54283	5370	98CW0242	GRAND JCT KIWANIS FOUNDATION
JD NO. 2 PUMP	P	EAST SALT CREEK	72	SW	NW	SE	15	9	S	103	W	S	IS		0.2	12/31/1998	12/31/1997	12/12/1998	54402	1642	98CW0239	David N Coombe
JD NO. 1 PUMP	P	EAST SALT CREEK	72	SW	NW	SE	15	9	S	103	W	S	IS		0.5	12/31/1998	12/31/1997	12/16/1998	54406	1641	98CW0239	David N Coombe
RAMONA SPRINGS AND SEEP	SE	PLATEAU CREEK	72	NE	SE	NE	14	10	S	97	W	S	IDp	0.25	0.25	12/31/1999	12/31/1998	7/19/1985	54421.49508	5131	99CW0197	J L SEGRIST
DARRA SPRINGS AND SEEP	S	PLATEAU CREEK	72	SW	NE	NE	14	10	S	97	W	S	IDp	0.1	0.1	12/31/1999	12/31/1998	4/15/1989	54421.50874	5106	99CW0197	J L SEGREST
JAKE JR SPRINGS AND SEEP	SE	PLATEAU CREEK	72		NE	NE	14	10	S	97	W	S	IDp	0.05	0.05	12/31/1999	12/31/1998	4/15/1989	54421.50874	5114	99CW0197	J L SEGREST
JAKE SR SPRINGS AND SEEP	SE	PLATEAU CREEK	72		NE	NE	14	10	S	97	W	S	IDp	0.15	0.15	12/31/1999	12/31/1998	4/15/1989	54421.50874	5115	99CW0197	J L SEGREST
JANNA SPRINGS AND SEEP	SE	PLATEAU CREEK	72	SE	NW	NE	14	10	S	97	W	S	IDp	0.15	0.15	12/31/1999	12/31/1998	4/15/1989	54421.50874	5116	99CW0197	J L SEGREST
KINLEY SPRINGS AND SEEP	SE	PLATEAU CREEK	72	SW	NE	NE	14	10	S	97	W	S	IDp	0.18	0.18	12/31/1999	12/31/1998	4/15/1989	54421.50874	5120	99CW0197	J L SEGREST
JOHNSON DITCH	D	REED WASH	72	NW	NW	SW	35	2	N	3	W	U	IS		0.25	12/31/1999	12/31/1998	4/1/1993	54421.52321	1677	99CW0026	THYRILL JOHNSON
WOOTTEN PUMPING SYSTEM	L	EAST SALT CREEK	72	NE	SE	SW	15	9	S	103	W	S	IS	0.075	0.15	12/31/1999	12/31/1998	10/22/1999	54716	1714	99CW0219	JAMES R WOOTTEN
UTALINE DIVERSION NO. 1	P	COLORADO RIVER	72	NE	SW	NE	8	11	S	104	W	S	IS		4	12/31/1999	12/31/1998	11/1/1999	54726	1678	99CW0297	CJC Prop Prtnership-C Jouflas
UTALINE DIVERSION NO. 2	P	COLORADO RIVER	72	SW	SW	NE	8	11	S	104	W	S	IS		4	12/31/1999	12/31/1998	11/1/1999	54726	1679	99CW0297	CJC Prop Prtnership-C Jouflas
BIG SALT DIVERSION	D	BIG SALT WASH	72	NW	NW	SW	1	9	S	102	W	S	SW		0.25	12/31/1999	12/31/1998	12/31/1999	54786	1680	99CW0303	U S BUREAU OF LAND MANAGEMENT
MCCALLUM PUMP	P	LIMEKILN CREEK	72	SW	NE	NW	35	11	S	101	W	S	I	0.2	0.3	12/31/2000	12/31/1999	4/15/1992	54786.5197	1704	00CW0049	STEPHEN D MCCALLUM
ADAMS-CHEYNEY DIVERSION	D	COLORADO RIVER	72	NE	SW	SW	1	1	S	2	E	U	IR*		1	12/31/2000	12/31/1999	10/19/1999	54786.54713	1697	00CW0067	KEN HILL
RINDERLE DIVERSION DITCH	D	SINK CREEK	72	SW	SW	SE	17	1	S	2	E	U	ISW		6	12/31/2000	12/31/1999	12/30/1999	54786.54785	1689	00CW0023	GARY E RINDERLE
GOLD LAKE FEEDER PL	L	REED WASH	72		SE	NW	27	2	N	3	W	U	IR*		4	12/31/2000	12/31/1999	2/4/2000	54821	1692	00CW0206	TONY BRACH SR
CALDWELL POND NO 2 INTAKE	D	COLORADO RIVER	72	SE	NW	SE	15	11	S	101	W	S	IP*		0.25	12/31/2000	12/31/1999	3/1/2000	54847	1699	00CW0283	Robert R Caldwell
BURKETT RANCH DIT. HDGT2	D	BIG SALT WASH	72		SW	SE	6	1	N	2	W	U	IR*		2	12/31/2000	12/31/1999	7/12/2000	54980	1693	00CW0179	BEN E CARNES
RED BARN SPRING NO. 1	S	BIG CREEK	72	NE	NE	SW	4	10	S	95	W	S	I		0.071	12/31/2000	12/31/1999	8/10/2000	55009	5449	00CW0141	Cynthia H Crandell
RED BARN SPRING NO. 2	S	BIG CREEK	72	NE	NE	SW	4	10	S	95	W	S	I		0.071	12/31/2000	12/31/1999	8/10/2000	55009	5450	00CW0141	Cynthia H Crandell
MARSHALL PUMP	P	REED WASH	72	SW	NW	SW	9	2	N	3	W	U	I		0.25	12/31/2000	12/31/1999	8/22/2000	55021	1688	00CW0226	MICHAEL L MARSHALL
WALTERS MICROHYDROPOWER	Z	COON CREEK	72	SW	SW	NE	15	11	S	96	W	S	p		0.27	12/31/2000	12/31/1999	8/24/2000	55023	1683	00CW0150	LYNDA K WALTERS
JONES DIVERSION	D	COLORADO RIVER	72	NE	NE	NE	2	1	S	1	W	U	I		0.1	12/31/2000	12/31/1999	10/4/2000	55064	1690	00CW0205	FRED JONES
CALDWELL POND NO 1 INTAKE	D	COLORADO RIVER	72	SE	NW	SE	15	11	S	101	W	S	Ip		0.25	12/31/2000	12/31/1999	12/28/2000	55149	1700	00CW0290	Robert R Caldwell
BITTSY SPRING	S	KIMBALL CREEK	72	SE	NE	NE	14	9	S	95	W	S	IS	0.011	0.011	12/31/2001	12/31/2000	9/1/1997	55152.53935	5421	01CW0125	KEN STEADMAN
GERGELY PRESERVE DITCH	D	COLORADO RIVER	72		NW	NE	22	11	S	101	W	S	I	0.081	0.019	12/31/2001	12/31/2000	6/16/1999	55152.54588	1722	01CW0081	ROBERT & JAYME GERGELY
J L SPRING	S	BUZZARD CREEK	72	SW	NW	NE	26	9	S	93	W	S	SHW		0.007	12/31/2001	12/31/2000	6/10/2000	55152.54948	5419	01CW0168	JERRY & KATHY SHORT
DEL'S DITCH	D	MACK WASH	72	SE	NE	NE	27	9	S	103	W	S	I		0.787	12/31/2001	12/31/2000	8/10/2000	55152.55009	1716	01CW0226	DAVID & DIANNE MAXFIELD
KING DITCH	D	MESA CREEK	72	NW	NW	SW	8	11	S	96	W	S	AO		0.25	12/31/2001	12/31/2000	12/18/2000	55152.55139	731	01CW0340	CHUCK THORNBURGH
WORTHINGTON SPRING	S	PLATEAU CREEK	72	NE	SW	NW	25	10	S	97	W	S	AO		0.25	12/31/2001	12/31/2000	12/18/2000	55152.55139	1250	01CW0340	H L WORTHINGTON
BIG VU WELL NO. 2	W	WALLACE GULCH	72		SW	NW	25	10	S	97	W	S	H		0.033	12/31/2001	12/31/2000	12/18/2000	55152.55139	5409	01CW0340	Big Vu LLC
OWENS WELL	W	MESA CREEK	72	SE	SE	SW	31	10	S	96	W	S	IC		0.022	12/31/2001	12/31/2000	1/15/2001	55167	5457	01CW0181	JIM OWENS & DEBORAH BULMER
PETERS SPRING NO 1	S	GROVE CREEK	72	NW	SE	NW	1	10	S	95	W	S	ISW		0.04	12/31/2001	12/31/2000	2/16/2001	55199	5413	01CW0043	Brenda Peters
PETERS SPRING NO 2	S	GROVE CREEK	72	NW	SE	NW	1	10	S	95	W	S	ISW		0.12	12/31/2001	12/31/2000	2/16/2001	55199	5414	01CW0043	Brenda Peters
PETERS SPRING NO 3	S	GROVE CREEK	72	NW	SE	NW	1	10	S	95	W	S	ISW		0.05	12/31/2001	12/31/2000	2/16/2001	55199	5415	01CW0043	Brenda Peters
BESWICK DITCH	D	COLORADO RIVER	72	NE	NW	SE	17	1	S	1	W	U	I		0.1	12/31/2001	12/31/2000	3/8/2001	55219	1730	01CW0049	RICHARD TRAVER
RUBY CANYON PUMP AND PL	P	COLORADO RIVER	72	NW	SE	SW	18	10	S	103	W	S	IPS		4.6	12/31/2001	12/31/2000	5/29/2001	55301	1200	01CW0316	JAMES 'JIM' GIBSON
VINCENT DIVERSION	D	COLORADO RIVER	72	NE	SW	SW	35	1	N	1	W	U	IPS		0.5	12/31/2001	12/31/2000	10/1/2001	55426	1701	01CW0341	RONALD D VINCENT

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township	Range	P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
4 ACRE PUMP	P	COLORADO RIVER	72	NE	SE	NW	24	1 S	1 E	U	IFW		0.2	12/31/2001	12/31/2000	11/2/2001	55458	1720	01CW0283	Richard T Mallett
SEGREST SPRING & SEEP	S	PLATEAU CREEK	72	NE	SE	NE	14	10 N	97 W	S	IDp		0.25	12/31/2001	12/31/2000	12/21/2001	55507	5428	01CW0323	JAKE L SEGREST
SHOTWELL DITCH PICKUP ENLAR	D	COTTONWOOD CREEK	72	SE	NE	NW	30	10 S	95 W	S	IS		0.7	12/31/2002	12/31/2001	4/1/1913	55517.23101	1745	02CW0326	Carlyle, Mike & Dave Currier
SHOTWELL DITCH PICKUP ENLAR	D	COTTONWOOD CREEK	72	SE	NE	NW	30	10 S	95 W	S	IS		0.3	12/31/2002	12/31/2001	4/1/1944	55517.34424	1745	02CW0327	Carlyle, Mike & Dave Currier
BROOK SPRING	S	TATE CREEK	72	SW	NE	SW	30	10 S	96 W	S	IP*		0.5	12/31/2002	12/31/2001	2/13/1995	55517.53004	5417	02CW0218	DEL DAWSON
CRONK PROP SEEP DRAW DIVR	D	COLORADO RIVER	72	SE	NE	SW	9	1 N	1 W	U	W		1	12/31/2002	12/31/2001	10/1/2001	55517.55426	1738	02CW0066	TOM & PATTI CRONK
JENKINS CROSS PHILLIPS 1	D	BULL CREEK	72	NE	SE	NW	6	11 S	95 W	S	IRP		1	12/31/2002	12/31/2001	12/15/2001	55517.55501	718	02CW0002	John Walter
BUCHER DITCH NO. 4	D	COTTONWOOD CREEK	72	NE	NE	NW	29	10 S	95 W	S	IDO		3	12/31/2002	12/31/2001	12/15/2001	55517.55501	1721	01CW0348	WES BUCHER
ELKINS SPRING #1	S	BULL CREEK	72	SW	SW	SE	24	10 N	96 W	S	ISO		0.1	12/31/2002	12/31/2001	12/15/2001	55517.55501	5430	02CW0002	Anthony D and Lori C Elkins
ELKINS SPRING #2	S	BULL CREEK	72	SW	SW	SE	24	10 N	96 W	S	ISO		0.1	12/31/2002	12/31/2001	12/15/2001	55517.55501	5431	02CW0002	Anthony D and Lori C Elkins
ELKINS SPRING #3	S	BULL CREEK	72	SW	SW	SE	24	10 N	96 W	S	ISO		0.1	12/31/2002	12/31/2001	12/15/2001	55517.55501	5432	02CW0002	Anthony D and Lori C Elkins
ELKINS SPRING #4	S	BULL CREEK	72	NW	SW	SE	24	10 N	96 W	S	ISO		0.1	12/31/2002	12/31/2001	12/15/2001	55517.55501	5433	02CW0002	Anthony D and Lori C Elkins
ELKINS SPRING #5	S	BULL CREEK	72	NW	SW	SE	24	10 N	96 W	S	ISO		0.1	12/31/2002	12/31/2001	12/15/2001	55517.55501	5434	02CW0002	Anthony D and Lori C Elkins
ELKINS SPRING #6	S	BULL CREEK	72	NW	SW	SE	24	10 N	96 W	S	ISO		0.1	12/31/2002	12/31/2001	12/15/2001	55517.55501	5435	02CW0002	Anthony D and Lori C Elkins
ELKINS SPRING #7	S	BULL CREEK	72	SW	NW	SE	24	10 N	96 W	S	ISO		0.1	12/31/2002	12/31/2001	12/15/2001	55517.55501	5436	02CW0002	Anthony D and Lori C Elkins
ELKINS SPRING #8	S	BULL CREEK	72	SW	NW	SE	24	10 N	96 W	S	ISO		0.1	12/31/2002	12/31/2001	12/15/2001	55517.55501	5437	02CW0002	Anthony D and Lori C Elkins
ELKINS SPRING #9	S	BULL CREEK	72	NW	NW	NE	25	10 N	96 W	S	ISO		0.1	12/31/2002	12/31/2001	12/15/2001	55517.55501	5438	02CW0002	Anthony D and Lori C Elkins
BUCHER SPRING NO. 2	S	COTTONWOOD CREEK	72	NW	SE	SE	19	10 S	95 W	S	ID*		0.15	12/31/2002	12/31/2001	12/15/2001	55517.55501	5439	01CW0342	WES BUCHER
BUCHER SPRING NO. 3	S	COTTONWOOD CREEK	72	SE	SE	SE	19	10 S	95 W	S	ID*		0.15	12/31/2002	12/31/2001	12/15/2001	55517.55501	5440	01CW0342	WES BUCHER
BUCHER SPRING NO. 4	S	COTTONWOOD CREEK	72	SE	SE	SE	19	10 S	95 W	S	ID*		0.15	12/31/2002	12/31/2001	12/15/2001	55517.55501	5441	01CW0342	WES BUCHER
BUCHER SPRING NO. 5	S	COTTONWOOD CREEK	72	SE	SE	SE	19	10 S	95 W	S	ID*		0.15	12/31/2002	12/31/2001	12/15/2001	55517.55501	5442	01CW0342	WES BUCHER
BUCHER SPRING NO. 6	S	COTTONWOOD CREEK	72	SE	SE	SE	19	10 S	95 W	S	ID*		0.15	12/31/2002	12/31/2001	12/15/2001	55517.55501	5443	01CW0342	WES BUCHER
BUCHER SPRING NO. 7	S	COTTONWOOD CREEK	72	SE	SE	SE	19	10 S	95 W	S	ID*		0.15	12/31/2002	12/31/2001	12/15/2001	55517.55501	5444	01CW0342	WES BUCHER
BUCHER SPRING NO. 8	S	COTTONWOOD CREEK	72	SE	SE	SE	19	10 S	95 W	S	ID*		0.15	12/31/2002	12/31/2001	12/15/2001	55517.55501	5445	01CW0342	WES BUCHER
BUCHER SPRING NO. 9	S	COTTONWOOD CREEK	72	SE	SE	SE	19	10 S	95 W	S	ID*		0.15	12/31/2002	12/31/2001	12/15/2001	55517.55501	5446	01CW0342	WES BUCHER
BUCHER SPRING NO. 10	S	COTTONWOOD CREEK	72	SE	SE	SE	19	10 S	95 W	S	ID*		0.15	12/31/2002	12/31/2001	12/15/2001	55517.55501	5447	01CW0342	WES BUCHER
BUCHER SPRING NO. 11	S	COTTONWOOD CREEK	72	SE	SE	SE	19	10 S	95 W	S	ID*		0.15	12/31/2002	12/31/2001	12/15/2001	55517.55501	5448	01CW0342	WES BUCHER
RASMUSSEN HYDRO DIV	Z	COON CREEK	72	SE	SE	SE	15	11 S	96 W	S	p		0.27	12/31/2002	12/31/2001	2/14/2002	55562	1702	02CW0033	ERIC & LISA RASMUSSEN
AMBROSICH PUMP	P	COLORADO RIVER	72	NE	SW	NE	17	1 S	1 W	U	IS		0.27	12/31/2002	12/31/2001	4/1/2002	55608	1713	02CW0219	STEVEN & ANNE AMBROSICH
PORTER PUMP & PIPELINE	P	REED WASH	72		SE	SW	17	2 N	2 W	U	IFS		0.125	12/31/2002	12/31/2001	7/10/2002	55708	1735	02CW0188	JASON & KAMI PORTER
BRANDON PUMP & PIPELINE	P	COLORADO RIVER	72	NE	NW	SE	27	1 N	1 W	U	I		0.5	12/31/2002	12/31/2001	7/22/2002	55720	1726	02CW0345	DALE & SHERRY BRANDON
BRANDON POND FEEDER DITCH	D	COLORADO RIVER	72	SW	NE	SE	27	1 N	1 W	U	IO	0.5	0.2	12/31/2002	12/31/2001	7/22/2002	55720	1727	02CW0345	DALE & SHERRY BRANDON
LEARNING CENTER WELL	W	SPRING CREEK	72	NE	NE	SW	22	10 S	96 W	S	CFH		0.02	12/31/2002	12/31/2001	11/13/2002	55834	5458	02CW0292	LINDA MC BRIDE
WATSON CREEK RANCH DIVERSIO	D	WATSON CREEK	72	SW	SE	SW	1	1 S	2 E	U	IFS		2	12/31/2003	12/31/2002	10/1/1999	55882.54695	1719	03CW0107	Norman Keith & Kathy Gastfield
KIEFER DIVERSION	D	MACK WASH	72	NE	SE	NW	19	2 N	3 W	U	ISO		3.5	12/31/2003	12/31/2002	10/31/2001	55882.55456	1737	03CW0081	BARBARA KIEFER
JUMBO CAMPGROUND WELL	R	MESA CREEK	72	NW	NW	NW	35	11 S	96 W	S	CD		0.056	12/31/2003	12/31/2002	7/26/2002	55882.55724	5469	03CW0315	U S FOREST SERVICE
ADOBE CREEK PUMP & PIPELINE	P	COLORADO RIVER	72	NW	NW	SE	28	1 N	2 W	U	IW		5.5	12/31/2003	12/31/2002	4/1/2003	55973	1747	03CW0317	ADOBE CREEK NATIONAL INC
NAKANO DIVERSION	D	COLORADO RIVER	72	NW	NE	NE	2	1 S	1 W	U	I		0.156	12/31/2003	12/31/2002	5/1/2003	56003	1724	03CW0283	JEFF & SHERRY NAKANO
MEDILL DITCH	D	BIG SALT WASH	72	SE	SW	NW	16	2 N	2 W	U	IFS		0.22	12/31/2003	12/31/2002	5/24/2003	56026	1750	03CW0106	JARED & EFFIE MEDILL
HOEFNER SPRING	S	MESA CREEK	72	SW	SW	NW	8	11 S	96 W	S	IS		0.1	12/31/2003	12/31/2002	9/17/2003	56142	5456	03CW0204	VICTOR C HOEFNER
CURRY SPRING	S	BUZZARD CREEK	72		SE	NW	18	9 S	92 W	S	IS		0.033	12/31/2003	12/31/2002	9/29/2003	56154	5451	03CW0207	RAYMOND & ANITA CURRY
BOREN DIVERSION NO 2	D	EAST SALT CREEK	72	NE	NE	NE	15	9 S	103 W	S	I		0.75	12/31/2003	12/31/2002	11/15/2003	56201	1740	03CW0316	Mark Williams
BOREN DIVERSION NO 3	D	EAST SALT CREEK	72	NE	NE	NE	15	9 S	103 W	S	I		0.75	12/31/2003	12/31/2002	11/15/2003	56201	1741	03CW0316	Mark Williams
GRUMPY NO. 1 SPRING	S	MESA CREEK	72	NW	NE	SE	30	10 S	96 W	S	IS		0.05	12/31/2004	12/31/2003	5/24/2004	56392	5455	04CW0075	Richard Allan Smith
BOREN DIVERSION NO 4	D	EAST SALT CREEK	72	NE	SW	SW	15	9 S	103 W	S	I		0.5	12/31/2003	12/31/2002	7/15/2004	56444	1742	03CW0316	Mark Williams

Notes:

Highlighted rows indicate conditional wat Highlig Highlighted rows indicate conditio High Highl Highl Highlig High Highl Hi High Hig Hig Highli Highlig Highligh Highlighted Highlighted Highlighted Highlighted ro Highlig Highlighted ro Highlighted rows indicate conditional water ri

District 72
Conditional Diversions

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township	Range	P.M.	Use	Net Absolute (cfs)	Net Conditional (cfs)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership

Data Sources Include - Colorado Decisions Support System (CDSS) Database, Hydrobase Colorado Division of Water Resources (DWR), and personal discussion with water commissioner

District 72
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township	Range	P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
T E KITSON RESERVOIR	R	COTTONWOOD CREEK	72	SE	NW	NE	24	11 S	95 W	S	I		13.06	15182	12634	10/8/1932	30895.30231	3931	90CW0275	MYWAY RANCH
KIRKENDALL RESERVOIR	R	LEON CREEK	72	SE	SW	NW	27	11 S	93 W	S	I		582.49	21752	16158	7/24/1952	37460	3838	916	UTE WATER CONS DISTRICT
H U ROBBINS RESERVOIR	R	MESA CREEK	72	NE	NE	NW	20	11 S	96 W	S	IM*		50	21752	16158	5/18/1953	37758	3869	928	POWDERHORN METRO DISTRICT II
OWENS CREEK RESERVOIR	R	OWENS CREEK	72	SW	SE	SW	34	9 S	92 W	S	IM*		31786	04/13/72	07/21/59	7/1/1952	40013.37437	4081	1006	BATTLEMENT MESA CONSERV DIST
VIRGINIA MESA RESERVOIR	R	COLORADO RIVER	72	NW	SW	NE	5	9 S	97 W	S	ID		25.26	04/13/72	07/21/59	7/18/1957	40013.3928	4092	1017	CHEVRON USA INC
JACOBSON RESERVOIR	R	COLORADO RIVER	72	NW	NW	SW	35	1 N	1 W	U	IRS		7.18	04/13/72	07/21/59	6/21/1963	41444	3960	1034	VILLAGE HOMES
BUZZARD CREEK DAM & RES	R	BUZZARD CREEK	72	NW	SE	SW	23	9 S	94 W	S	IR*		20000	04/13/72	07/21/59	4/17/1964	41745	4058	1041	BATTLEMENT MESA CONSERV DIST
SUNNYBROOK RES NO 2	R	PLATEAU CREEK	72	NE	SE	SW	21	11 S	96 W	S	RP		250	04/13/72	07/21/59	10/1/1964	41912	4088	1048	Stephan & Bruce Lambert
SUNNYBROOK RES NO 3	R	MESA CREEK	72	SE	SE	SW	21	11 S	96 W	S	RP		250	04/13/72	07/21/59	10/1/1964	41912	4089	1049	Stephan & Bruce Lambert
VIRGINIA MESA RESERVOIR	R	COLORADO RIVER	72	NW	SW	NE	5	9 S	97 W	S	IN*		25.26	12/31/1970	12/31/1969	7/18/1957	43829.3928	4092	W0049	CHEVRON USA INC
BIG PARK RESERVOIR	R	LEON CREEK	72	SW	SW	SE	32	10 S	93 W	S	DO		5650	12/31/1970	12/31/1969	9/17/1970	44089	4095	W0253	UTE WATER CONSY DIST
SCHORN NATURAL POND	R	BULL CREEK	72	SE	NE	SW	6	11 S	95 W	S	IR*	9	5	12/31/1972	12/31/1971	6/1/1935	44559.31197	4084	W1769	HOLLIS SCARBROUGH
POND NO 3	R	MESA CREEK	72		NW	SW	20	11 S	96 W	S	P		1.5	12/31/1972	12/31/1971	11/11/1971	44559.44509	4099	W0476	Jack Treece
POND NO 1	R	PLATEAU CREEK	72		NW	SW	20	11 S	96 W	S	P		1.2	12/31/1972	12/31/1971	11/12/1971	44559.4451	4082	W0476	Jack Treece
POND NO 2	R	MESA CREEK	72		NW	SW	20	11 S	96 W	S	P		2.4	12/31/1972	12/31/1971	11/12/1971	44559.4451	4098	W0476	Jack Treece
POND NO 4	R	MESA CREEK	72		SW	NW	20	11 S	96 W	S	P		1.8	12/31/1972	12/31/1971	11/12/1971	44559.4451	4100	W0476	Jack Treece
POND NO 5	R	MESA CREEK	72		SW	NW	20	11 S	96 W	S	P		3	12/31/1972	12/31/1971	11/12/1971	44559.4451	4101	W0476	Jack Treece
KOVENE RESERVOIR	R	LITTLE SALT WASH	72	SE	NE	SE	27	9 S	103 W	S	I		2	12/31/1973	12/31/1972	2/3/1972	44925.44593	4075	W1820	A I KOVENE
SCHORN RESERVOIR	R	BULL CREEK	72	NW	NE	SE	5	11 S	95 W	S	I		15	12/31/1974	12/31/1973	12/31/1924	45290.27393	4085	W2340	DOUG GROSS
DEER SPRINGS POND	R	PLATEAU CREEK	72	SW	NW	NW	36	10 S	96 W	S	PDS		5	12/31/1974	12/31/1973	12/1/1973	45290.4526	4066	W2250	RALPH STUART
HORSE THIEF TRAIL POND 2	R	COLORADO RIVER	72	SW	SE	NE	7	1 N	3 W	U	ID		6	12/31/1976	12/31/1975	6/1/1975	46020.45807	4073	W3445	W Hazan
JERRY CREEK RES NO 2	R	PLATEAU CREEK	72	NW	SW	NE	16	10 S	96 W	S	IM*		7791	12/31/1978	12/31/1977	10/7/1977	46751.46666	3962	W3884	Ute Water Conservancy District
DORCHESTER COLOMINE PL 2	L	BIG SALT WASH	72	NW	NW	NW	33	2 N	2 W	U	IC*		10	12/31/1979	12/31/1978	12/7/1979	47457	1356	79CW0326	American Shield Coal
RIDGES POND NO 4	R	COLORADO RIVER	72	SE	NW	NW	20	1 S	1 W	U	IM*		71	12/31/1981	12/31/1980	10/1/1980	47847.47756	3939	81CW0411	City of Grand Junction
SALT CREEK RESERVOIR	R	SALT CREEK(GRAND VALLEY)	72	SE	NE	SW	33	9 S	103 W	S	IN*		3000	12/31/1981	12/31/1980	6/12/1981	48010	3965	81CW0297	TRI-STATE GENERATION
PARADISE HILLS LAKE NO 3	R	COLORADO RIVER	72	NW	SE	NE	26	1 N	1 W	U	I		82	12/31/1982	12/31/1981	7/7/1982	48400	3945	82CW0306	Paradise Hills HOA
POWDER RIDGE RES NO 1	R	MESA CREEK	72	NW	SE	SE	20	11 S	96 W	S	IM*		2.6	12/31/1984	12/31/1983	7/31/1984	49155	4111	84CW0562	POWDER RIDGE DEVELOPMENT LTD
POWDER RIDGE RES NO 2	R	MESA CREEK	72	NW	SE	SE	20	11 S	96 W	S	IM*		3.8	12/31/1984	12/31/1983	7/31/1984	49155	4112	84CW0562	POWDER RIDGE DEVELOPMENT LTD
POWDER RIDGE RES NO 3	R	MESA CREEK	72	SW	NE	SE	20	11 S	96 W	S	IM*		2.6	12/31/1984	12/31/1983	7/31/1984	49155	4113	84CW0562	POWDER RIDGE DEVELOPMENT LTD
POWDER RIDGE RES NO 4	R	MESA CREEK	72	SW	NE	SE	20	11 S	96 W	S	IM*		2	12/31/1984	12/31/1983	7/31/1984	49155	4114	84CW0562	POWDER RIDGE DEVELOPMENT LTD
POWDER RIDGE TANK	R	MESA CREEK	72	SE	SW	SE	20	11 S	96 W	S	IM*		3.1	12/31/1984	12/31/1983	7/31/1984	49155	4115	84CW0562	POWDER RIDGE DEVELOPMENT LTD
BEAVER RESERVOIR	R	MESA CREEK	72	NW	SE	NE	19	11 S	96 W	S	IM*		30	12/31/1986	12/31/1985	1/30/1986	49703	4002	86CW0015	POWDERHORN RESORT CORPORATION
WEST BENCH RES NO 1	R	MESA CREEK	72	NW	NE	SW	32	11 S	96 W	S	IM*		110	12/31/1987	12/31/1986	12/7/1987	50379	3749	87CW0372	POWDERHORN METRO DISTRICT II
WEST BENCH RES NO 2	R	MESA CREEK	72	NW	SE	NW	32	11 S	96 W	S	IM*		132	12/31/1987	12/31/1986	12/7/1987	50379	3750	87CW0372	POWDERHORN METRO DISTRICT II
UPPER BEAVER RESERVOIR	R	MESA CREEK	72	NW	SW	NE	31	11 S	96 W	S	IM*		196	12/31/1987	12/31/1986	12/7/1987	50379	3751	87CW0372	POWDERHORN METRO DISTRICT II
LOWER LIFT TWO RESERVOIR	R	MESA CREEK	72	NW	NE	NW	31	11 S	96 W	S	IM*		110	12/31/1987	12/31/1986	12/7/1987	50379	3752	87CW0372	POWDERHORN METRO DISTRICT II
UPPER LIFT TWO RESERVOIR	R	MESA CREEK	72	SE	NW	NW	31	11 S	96 W	S	IM*		176	12/31/1987	12/31/1986	12/7/1987	50379	3753	87CW0372	POWDERHORN METRO DISTRICT II
H U ROBBINS RESERVOIR	R	MESA CREEK	72	NE	NE	NW	20	11 S	96 W	S	IM*		56	12/31/1988	12/31/1987	8/4/1986	50403.49889	3869	88CW0342	POWDERHORN METRO DISTRICT II
BONACCI POND NO 1	R	MESA CREEK	72	NE	NE	NE	21	11 S	96 W	S	IC*		28.75	12/31/1988	12/31/1987	3/15/1988	50478	4020	88CW0384	D Hoover & Assoc Inv Inc
BONACCI POND NO 2	R	MESA CREEK	72	NE	SE	SW	21	11 S	96 W	S	IC*		33.8	12/31/1988	12/31/1987	3/15/1988	50478	4021	88CW0384	D Hoover & Assoc Inv Inc
ADAMS SOUTH LAKE WELL	WR	COLORADO RIVER	72	NE	SE	NW	16	1 S	1 W	U	NE	131	87	12/31/1989	12/31/1988	2/16/1989	50816	5248	89CW0192	WHITEWATER BUILDING MATERIALS
PALISADE RESERVOIR NO 4	R	RAPID CREEK	72	NE	SW	SW	28	11 S	97 W	S	IM*		45	12/31/1989	12/31/1988	3/28/1989	50856	4118	89CW0089	Town of Palisade
PALISADE RESERVOIR NO 5	R	RAPID CREEK	72	SW	SW	NE	28	11 S	97 W	S	IM*		165	12/31/1989	12/31/1988	3/28/1989	50856	4119	89CW0089	Town of Palisade
PHYLCON WATERTANK NO 2	R	TATE CREEK	72	NW	SW	NE	12	11 S	97 W	S	PS		4.5	12/31/1990	12/31/1989	10/1/1990	51408	3974	90CW0346	Phylcon Inc % Robert Risling
PHYLCON WATERTANK NO 3	R	TATE CREEK	72	SW	SW	NE	12	11 S	97 W	S	PS		6	12/31/1990	12/31/1989	10/1/1990	51408	3978	90CW0346	Phylcon Inc % Robert Risling
ORCHARD GROVE IND PK PIT	W	COLORADO RIVER	72	SW	SE	SW	5	1 S	1 W	U	CN	59.86	22.99	12/31/1990	12/31/1989	11/20/1990	51458	5328	90CW0257	A&G PARTNERSHIP
ARCUBY PIT	W	COLORADO RIVER	72	NW	SE	SW	20	1 N	2 W	U	CN	71.03	96.48	12/31/1990	12/31/1989	12/21/1990	51489	5329	90CW0261	GRAND JCT CONCRETE PIPE COMP
32-1/4 ROAD PIT	W	COLORADO RIVER	72	NW	SE	NW	23	1 S	1 E	U	CN		98.69	12/31/1992	12/31/1991	7/5/1977	51864.46572	5327	92CW0289	Corn Construction Comp

District 72
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
HORIZON GLEN POND NO 1	R	COLORADO RIVER	72	NW	SE	NE	2	1	S	1	W	U	IPF		1	12/31/1992	12/31/1991	3/1/1991	51864.51559	3832	92CW0265	Horizon Glen HOA
Y T RESERVOIR	R	GROVE CREEK	72	SE	SW	SW	16	10	S	94	W	S	A		125	12/31/1992	12/31/1991	6/2/1992	52018	3919	92CW0271	LARAMIE ENERGY
LEBERER RESERVOIR	R	COLORADO RIVER	72	SW	NW	SW	2	11	S	98	W	S	RPS		0.5	12/31/1994	12/31/1993	2/10/1994	52636	4012	94CW0038	CHARLENE LEBERER
PROSPECT POND NO 1	R	BIG SALT WASH	72	SW	NW	NW	24	6	S	101	W	S	PF*	0.5	8.5	12/31/1994	12/31/1993	8/12/1994	52819	4014	94CW0186	#10 ENTERPRISES LLC
PROSPECT POND NO 2	R	BIG SALT WASH	72	SW	NW	NW	24	6	S	101	W	S	PF*	0.5	8.5	12/31/1994	12/31/1993	8/12/1994	52819	4015	94CW0186	#10 ENTERPRISES LLC
BEAR POND	R	BIG SALT WASH	72	SW	NW	NW	25	6	S	101	W	S	PF*		7.5	12/31/1994	12/31/1993	8/12/1994	52819	4016	01CW0029	#10 ENTERPRISES LLC
WALLS POND	R	EAST SALT CREEK	72	SW	SW	SW	30	5	S	100	W	S	PF*	0.72	9.28	12/31/1994	12/31/1993	8/12/1994	52819	4017	94CW0186	#10 ENTERPRISES LLC
PALISADE RESERVOIR NO 4	R	RAPID CREEK	72	NE	SW	SW	28	11	S	97	W	S	IM*		166.8	12/31/1994	12/31/1993	9/8/1994	52846	4118	94CW0360	Town of Palisade
PALISADE RESERVOIR NO 5	R	RAPID CREEK	72	SW	SW	NE	28	11	S	97	W	S	IM*		181.6	12/31/1994	12/31/1993	9/8/1994	52846	4119	94CW0360	Town of Palisade
DUKE LAKE	WR	COLORADO RIVER	72	SE	SE	SE	8	1	S	1	W	U	IR*		56.9	12/31/1995	12/31/1994	4/25/1991	52960.51614	5359	95CW0312	COLORADO STATE PARKS
CONNECTED LAKE	WR	COLORADO RIVER	72	NE	NW	SE	8	1	S	1	W	U	IR*		401.3	12/31/1995	12/31/1994	4/25/1991	52960.51614	5360	95CW0312	COLORADO STATE PARKS
ENDANGERED SPECIES LAKE	WR	COLORADO RIVER	72	NW	NW	SE	8	1	S	1	W	U	IR*		109.6	12/31/1995	12/31/1994	4/25/1991	52960.51614	5361	95CW0312	COLORADO STATE PARKS
BROOK POND	R	TATE CREEK	72	SW	NE	SW	30	10	S	96	W	S	IP*		2.5	12/31/1995	12/31/1994	2/13/1995	53004	4031	95CW0345	DEL DAWSON
NATIVE POND	R	TATE CREEK	72	NW	NE	SW	30	10	S	96	W	S	IP*		5	12/31/1995	12/31/1994	2/13/1995	53004	4032	95CW0345	DEL DAWSON
BROWN POND	R	TATE CREEK	72	NW	NE	SW	30	10	S	96	W	S	IP*		7.5	12/31/1995	12/31/1994	2/13/1995	53004	4035	95CW0345	DEL DAWSON
RAINBOW POND	R	TATE CREEK	72	NE	NE	SW	30	10	S	96	W	S	IP*		8	12/31/1995	12/31/1994	2/13/1995	53004	4036	95CW0345	DEL DAWSON
ROOTS RESERVOIR	R	MACK WASH	72	SW	SW	NE	19	2	N	3	W	U	IR*		75	12/31/1995	12/31/1994	2/17/1995	53008	4019	95CW0029	HOSKINS, WILSON & REID
SWANSON POND NO 5	R	GROVE CREEK	72	SW	SW	SW	21	10	S	94	W	S	RP*		2	12/31/1995	12/31/1994	9/8/1995	53211	4041	95CW0306	ROSEMARIE GLAS
SWANSON POND NO 6	R	GROVE CREEK	72	SW	SW	SW	21	10	S	94	W	S	RP*		2	12/31/1995	12/31/1994	9/8/1995	53211	4042	95CW0306	ROSEMARIE GLAS
SWANSON POND NO 7	R	GROVE CREEK	72	SE	NW	SW	21	10	S	94	W	S	RP*		2	12/31/1995	12/31/1994	9/8/1995	53211	4043	95CW0306	ROSEMARIE GLAS
SWANSON POND NO 8	R	GROVE CREEK	72	SE	NW	SW	21	10	S	94	W	S	RP*		2	12/31/1995	12/31/1994	9/8/1995	53211	4044	95CW0306	ROSEMARIE GLAS
SWANSON POND NO 9	R	GROVE CREEK	72	NW	SW	SW	21	10	S	94	W	S	RP*		2	12/31/1995	12/31/1994	9/8/1995	53211	4045	95CW0306	ROSEMARIE GLAS
SUNSET POND NO 1	R	GROVE CREEK	72	NW	SE	SE	21	10	S	94	W	S	RP*		4	12/31/1995	12/31/1994	9/8/1995	53211	4046	95CW0306	ROSEMARIE GLAS
SUNSET POND NO 2	R	GROVE CREEK	72	NW	SE	SE	21	10	S	94	W	S	RP*		2	12/31/1995	12/31/1994	9/8/1995	53211	4047	95CW0306	ROSEMARIE GLAS
SUNSET POND NO 3	R	GROVE CREEK	72	NE	SW	SE	21	10	S	94	W	S	RP*		2	12/31/1995	12/31/1994	9/8/1995	53211	4048	95CW0306	ROSEMARIE GLAS
SUNSET POND NO 4	R	GROVE CREEK	72	SE	NE	SW	21	10	S	94	W	S	RP*		6	12/31/1995	12/31/1994	9/8/1995	53211	4049	95CW0306	ROSEMARIE GLAS
SPRUCE MEADOW POND	R	GROVE CREEK	72	NE	NE	SW	21	10	S	94	W	S	RP*		2	12/31/1995	12/31/1994	9/8/1995	53211	4050	95CW0306	ROSEMARIE GLAS
HIGHLINE RESERVOIR	R	MACK WASH	72	NW	SE	SW	5	2	N	3	W	U	IC*		2350	12/31/1995	12/31/1994	10/20/1995	53253	3957	95CW0311	COLORADO STATE PARKS
MACK MESA RESERVOIR	R	MACK WASH	72	SW	NE	SW	13	9	S	103	W	S	IC*		275	12/31/1995	12/31/1994	10/20/1995	53253	4077	95CW0310	COLORADO STATE PARKS
VAN WAGNER LAKE WELL	WR	COLORADO RIVER	72	SW	SE	SW	20	1	S	1	E	U	IR*		118	12/31/1995	12/31/1994	10/20/1995	53253	5250	95CW0312	WHITEWTER BLDG/COLO STATE PARK
LAKE GABY	R	WEST SALT CREEK	72		NW	NW	32	5	S	102	W	S	IP*		1.5	12/31/1996	12/31/1995	3/19/1996	53404	3756	96CW0082	LAZY 3X RANCH
FEUERBORN PIT	W	COLORADO RIVER	72	SE	NW	SW	20	1	S	1	E	U	NE	25.6	73.54	12/31/1996	12/31/1995	4/18/1996	53434	5392	96CW0320	GRAND JCT PIPE - ED SETTLE
CLIFTON WATER PIT	W	COLORADO RIVER	72	SE	SW	SW	7	1	S	2	E	U	NE	54.02	23.17	12/31/1996	12/31/1995	10/3/1996	53602	5373	96CW0308	CLIFTON WATER DISTRICT
SHIRLEN POND NO. 2	R	COLORADO RIVER	72	NW	NE	NW	24	1	S	1	E	U	IDS		2	12/31/1998	12/31/1997	3/30/1990	54056.51223	3519	98CW0235	Louis V Shirlen
SHIRLEN POND NO. 1	R	COLORADO RIVER	72	NW	NE	NW	24	1	S	1	E	U	DS		0.04	12/31/1998	12/31/1997	3/30/1993	54056.52319	3518	98CW0235	Louis V Shirlen
23 ROAD PIT ENLARGEMENT	W	COLORADO RIVER	72	SW	NW	SW	5	1	S	1	W	U	NE	90.94	34.46	12/31/1998	12/31/1997	10/22/1997	54056.53986	5391	98CW0014	Grand Junction Concrete Pipe
DEATON WILDLIFE POND #1	R	EAST SALT CREEK	72	NW	NW	SE	22	9	S	103	W	S	IFW		1.75	12/31/1998	12/31/1997	2/4/1998	54091	3500	98CW0011	Gil Angelotti
LAGO MARIA ELENA RES	R	COLORADO RIVER	72	NE	SE	NE	23	1	S	1	E	U	IR*		0.54	12/31/1998	12/31/1997	5/2/1998	54178	3523	98CW0109	BONNIE BROOK VINEYARDS HOA
BIG SALT RESERVOIR	R	BIG SALT WASH	72		NW	SW	1	9	S	102	W	S	SW		0.88	12/31/1999	12/31/1998	12/31/1999	54786	3530	99CW0303	U S BUREAU OF LAND MANAGEMENT
ADAMS-CHEYNEY RESERVOIR	D	COLORADO RIVER	72	NE	SW	SW	1	1	S	2	E	U	IR*		1.25	12/31/2000	12/31/1999	10/19/1999	54786.54713	3548	00CW0067	KEN HILL
GOLD LAKE	R	REED WASH	72		SE	NW	27	2	N	3	W	U	IR*		30	12/31/2000	12/31/1999	2/4/2000	54821	3755	00CW0206	TONY BRACH SR
CALDWELL POND NO 2	R	COLORADO RIVER	72	NE	NW	SE	15	11	S	101	W	S	IP*		3	12/31/2000	12/31/1999	3/1/2000	54847	3552	00CW0283	Robert R Caldwell
CALDWELL POND NO 1	R	COLORADO RIVER	72	NE	NW	SE	15	11	S	101	W	S	Ip		3	12/31/2000	12/31/1999	12/28/2000	55149	3551	00CW0290	Robert R Caldwell
GERGELY POND	D	COLORADO RIVER	72		NW	NE	22	11	S	101	W	S	I		0.29	12/31/2001	12/31/2000	6/16/1999	55152.54588	3710	01CW0100	ROBERT & JAYME GERGELY
SHORT RESERVOIR	R	BUZZARD CREEK	72	SE	NW	NE	26	9	S	93	W	S	SrW		2	12/31/2001	12/31/2000	7/10/2000	55152.54978	3558	01CW0197	KATHY L & JERRY L SHORT
BIG VU AUGMENTATION TANK	R	WALLACE GULCH	72		SW	NW	25	10	S	97	W	S	A		0.031	12/31/2001	12/31/2000	12/18/2000	55152.55139	3546	01CW0340	BIG VU LLC
BIG VU POND	R	WALLACE GULCH	72		SW	NW	25	10	S	97	W	S	RP*		2	12/31/2001	12/31/2000	12/18/2000	55152.55139	3547	01CW0340	BIG VU LLC
MCF ALTERNATE POND	R	MESA CREEK	72	SE	SE	SW	31	10	S	96	W	S	ICA		1	12/31/2001	12/31/2000	1/15/2001	55167	3723	01CW0181	JIM OWENS & DEBORAH BULMER

District 72
Conditional Storage Rights

Name of Structure	Type	Name of Source	Water District	Q10	Q40	Q160	Section	Township		Range		P.M.	Use	Net Absolute (AF)	Net Conditional (AF)	Adjudication Date	Prior Adjudication Date	Appropriation Date	Administration Number	ID Number	Priority Number / Case Number	Ownership
4 ACRE POND	P	COLORADO RIVER	72	NE	SE	NW	24	1	S	1	E	U	IFW		0.2	12/31/2001	12/31/2000	11/2/2001	55458	3701	01CW0283	Richard T Mallett
BROOK POND	R	TATE CREEK	72	SW	NE	SW	30	10	S	96	W	S	IP*		2.5	12/31/2002	12/31/2001	2/13/1995	55517.53004	3553	02CW0183	DEL DAWSON
NATIVE POND	R	TATE CREEK	72	NW	NE	SW	30	10	S	96	W	S	IP*		2.5	12/31/2002	12/31/2001	2/13/1995	55517.53004	3554	02CW0183	DEL DAWSON
BROWN POND	R	TATE CREEK	72	NW	NE	SW	30	10	S	96	W	S	IP*		7.5	12/31/2002	12/31/2001	2/13/1995	55517.53004	3555	02CW0183	DEL DAWSON
RAINBOW POND	R	TATE CREEK	72	NE	NE	SW	30	10	S	96	W	S	IP*		8	12/31/2002	12/31/2001	2/13/1995	55517.53004	3556	02CW0183	DEL DAWSON
ELKINS RESERVOIR NO. 2	R	BULL CREEK	72	NE	SE	NW	25	10	N	95	W	S	IR*		7.54	12/31/2002	12/31/2001	1/15/2001	55517.55167	3703	02CW0002	Anthony D and Lori C Elkins
CRONK PROP SEEPAGE DRAW	O	COLORADO RIVER	72		NE	SW	9	1	N	1	W	U	W		2.3	12/31/2002	12/31/2001	10/1/2001	55517.55426	3722	02CW0066	TOM & PATTI CRONK
BUCHER RESERVOIR NO. 5	R	COTTONWOOD CREEK	72	NE	SE	SE	19	10	S	95	W	S	IP*		3	12/31/2002	12/31/2001	11/15/2001	55517.55471	3708	01CW0342	WES BUCHER
BUCHER RESERVOIR NO. 6	R	COTTONWOOD CREEK	72	NW	SE	SE	19	10	S	95	W	S	IP*		3	12/31/2002	12/31/2001	11/15/2001	55517.55471	3709	01CW0342	WES BUCHER
BUCHER RESERVOIR	R	COTTONWOOD CREEK	72	SE	SE	SE	19	10	S	95	W	S	IP*		2.75	12/31/2002	12/31/2001	11/15/2001	55517.55471	3951	01CW0342	WES BUCHER
ELKINS RESERVOIR NO. 1	R	BULL CREEK	72	NE	NW	NE	25	10	N	95	W	S	IR*		7.52	12/31/2002	12/31/2001	12/15/2001	55517.55501	3702	02CW0002	Anthony D and Lori C Elkins
ELKINS RESERVOIR NO. 3	R	BULL CREEK	72	SE	NW	SE	24	10	N	95	W	S	IR*		8	12/31/2002	12/31/2001	12/15/2001	55517.55501	3704	02CW0002	Anthony D and Lori C Elkins
BUCHER RESERVOIR NO. 2	R	COTTONWOOD CREEK	72	SE	SW	SW	20	10	S	95	W	S	IP*		3	12/31/2002	12/31/2001	12/15/2001	55517.55501	3705	01CW0348	WES BUCHER
BUCHER RESERVOIR NO. 3	R	COTTONWOOD CREEK	72	SE	SW	SW	20	10	S	95	W	S	IP*		3	12/31/2002	12/31/2001	12/15/2001	55517.55501	3706	01CW0348	WES BUCHER
BUCHER RESERVOIR NO. 4	R	COTTONWOOD CREEK	72	SE	SW	SW	20	10	S	95	W	S	IP*		3	12/31/2002	12/31/2001	12/15/2001	55517.55501	3707	01CW0348	WES BUCHER
OVER POND	R	MACK WASH	72	NE	SE	NE	7	2	N	3	W	U	RPW		2.5	12/31/2002	12/31/2001	6/30/2002	55698	3716	02CW0335	JEFF & DENISE OVER
NORTH PASTURE POND	R	COLORADO RIVER	72	SE	NE	SW	27	1	N	1	W	U	SW		5	12/31/2002	12/31/2001	7/22/2002	55720	3712	02CW0345	DALE & SHERRY BRANDON
BRANDON POND	R	COLORADO RIVER	72	NW	NE	SE	27	1	N	1	W	U	ISW		0.5	12/31/2002	12/31/2001	7/22/2002	55720	3713	02CW0345	DALE & SHERRY BRANDON
WATSON CREEK RANCH POND	R	WATSON CREEK	72	NW	NE	NW	1	1	S	2	E	U	IFS		0.7	12/31/2003	12/31/2002	10/1/1999	55882.54695	3700	03CW0107	NORMAN KEITH & KATHY GASTFIELD
KIEFER POND	R	MACK WASH	72	NE	SE	NW	19	2	N	3	W	U	ISO		2.3	12/31/2003	12/31/2002	10/31/2001	55882.55456	3721	03CW0081	BARBARA KIEFER
ADOBE CREEK POND NO 1	R	COLORADO RIVER	72	SE	SE	SE	21	1	N	2	W	U	IW		18	12/31/2003	12/31/2002	4/1/2003	55973	3727	03CW0317	Adobe Creek National Inc
BOREN POND NO 2	R	EAST SALT CREEK	72	NW	NE	NE	14	9	S	103	W	S	IPW		2.5	12/31/2003	12/31/2002	11/15/2003	56201	3725	03CW0316	Mark Williams
GLACIER SPG RETAIN POND	R	MESA CREEK	72	NE	NW	SW	26	11	S	96	W	S	A		9.38	12/31/2003	12/31/2002	12/31/2003	56247	3868	03CW0315	U S FOREST SERVICE

Notes:
Highlighted rows indicate conditional water right may be used for energy development water demand
Data Sources Include - Colorado Decisions Support System (CDSS) Database, Hydrobase Colorado Division of Water Resources (DWR), and personal discussion with water commissioner