STATE OF COLORADO

Ebert - DNR, Jared <jared.ebert@state.co.us>

Coulson Pits

Peter Wayland <pwayland@weilandinc.com> Wed, Mar 6, 2019 at 10:41 AM
To: "Ebert - DNR, Jared" <jared.ebert@state.co.us>

Jared,

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Peter Wayland

Weiland, Inc

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WSI Weiland, Inc.
Environmental & Engineering

March 6, 2019

Environmental Support for:

- Transportation
- Land Development
- Mining
- Industry

Jared Ebert
Environmental Protection Specialist III
Colorado Division of Mining Reclamation & Safety
1313 Sherman St., Room 215
Denver, Colorado 80202

Re: Response to Inspection Reports for Gardels Pit (M-2005-033), Brownwood Pit (M-1979-059) and Kirtright Pit (M-1985-123)

Mr. Ebert,

In response to the corrective actions set forth in the Colorado Division of Mining Reclamation & Safety (DRMS) inspection reports dated December 7, 2018 for the three permits listed above, I have attached the *Expert Report for the Application for Water Rights of Coulson Excavating Co., Inc. and Coulson Gravel Ponds Augmentation Plan* (Plan).

This plan has also been Submitted to the Office of the State Engineer (SEO) for review and approval as the basis for renewal of the Temporary Substitute Water Supply Plans (SWSP). Copies of approvals for the renewals of the SWSP's will be submitted to the Division when they are received from the SEO.

The water attorney for the case to be filed in water court is Sean Rutledge of Patterson Rutledge & Associates LLC. Copies of the court filings will be submitted to the Division once they have been filed.

Peter Wayland

Peter Wayland
President

Encl. *Expert Report for the Application for Water Rights of Coulson Excavating Co., Inc. and Coulson Gravel Ponds Augmentation Plan, March 5, 2019*

EXPERT REPORT FOR
THE APPLICATION FOR WATER RIGHTS
OF COULSON EXCAVATING CO., INC.
AND COULSON GRAVEL PONDS AUGMENTATION PLAN

DIVISION 1 CASE NUMBER

Prepared for:

Coulson Excavating Co., Inc.
3609 North County Rd 13
Loveland, CO 80538

Prepared by:

Weiland, Inc.
PO Box 18087
Boulder, CO 80308

March 5, 2019

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1.0 BACKGROUND

1.1 PROJECT DESCRIPTION

Coulson Excavating Co., Inc. (CEC) owns and operates the Brownwood Pit, and have leased lands on which they have operated the Gardels, Kirtright and Challenger Pits. The Gardels, Kirtright and Challenger pits have undergone final reclamation as defined by the Colorado Land Reclamation Act for the Extraction of Construction Materials, Section 34-32.5-101, et seq., C.R.S. 1984, as amended. The Brownwood Pit has mined all of the aggregate resources, however continues to be used for the processing of imported aggregate materials and production of Hot Mix Asphalt (HMA). All four sites have mining cells which have filled with groundwater resulting in areas of free surface water which deplete groundwater otherwise tributary to the Big Thompson and S. Platte rivers through evaporation. The groundwater filled mining cells are referred to herein as gravel ponds. The gravel pond sites are located in Larimer and Weld Counties and all occur in Water District 4, Division 1 as defined by the Colorado Division of Water Resources (DWR). The gravel ponds are shown in **Figure 1 – Locations Map.**

This plan quantifies future evaporative losses in time, place and amount and replaces those losses by delivery of water in time, place and amount form other water rights. Water rights proposed for replacement of evaporative depletions include a 2019 groundwater water right, 19 shares in the changed Hill & Brush Ditch (H&B), all interest in the changed Osborn Irrigation System (OIS) and a 2019 water right storage and direct flow claim on the Big Thompson River. The H&B shares and the OIS water right are currently decreed for irrigation use only. This plan provides Historic Consumptive Use (HCU) analyses as the basis for the change of use portion of the application to water court. The uses needed to operate this augmentation plan and ongoing CEC mining operations include Augmentation, Storage and Industrial. This plan also includes two existing and two future water storage reservoirs that will be used to manage non-irrigation season replacements and allow for the firm yield of the changed use water rights.

2.0 EVAPORATIVE LOSS DEPLETIONS AND REPLACEMENT REQUIREMENT

2.1 GARDELS PIT

The Gardels Pit is located in the North ½ Section 19, Township 5 North, Range 68 West of the 6th PM. The site location is shown in **Figure 1 – Locations Map**.

The Gardels Pit was mined for sand & gravel under the Colorado Division of Reclamation Mining & Safety (DRMS) Permit # M2005-033 between the years of 2006 and 2009. A Temporary Substitute Water Supply Plan (SWSP) has been in effect to date. The site is currently reclaimed and will be released from the DRMS permit upon issuance of the final decreed augmentation plan by water court.

The Gardels Pit property has been reclaimed to leave 2 unlined groundwater fed ponds. Ponds 1 and 2 have free water surface areas of 6.8 acres and 2.0 acres respectively for a total free water area surface of 8.8 acres. The Gardels pond areas are shown in **Figure 4 – Gardels Pit Pond Areas.** A mining cell to the west of the property (west pit) was lined with a compacted clay liner, which was tested for leakage and approved by the Office of the State Engineer (OSE) in October of 2012 (see Appendix I). The Gardels West Pit is shown in **Figure 17 – Gardels West Reservoir.**

The evaporative loss calculations are given in **AI.1 Evaporative Loss Worksheet - Gardels Pit.** The monthly fraction of annual evaporation is based on the Guidelines for Substitute Water Supply Plans for elevations below 6500 ft published by the OSE. The annual free water surface evaporation is taken from NOAA Technical Report NWS 33 (**see Figure 2 – NOAA TR33 Pan Evaporation**). After applying precipitation credit, the net evaporative depletions were lagged utilizing the IDS AWAS program. Transmissivity was set to 20,000 g.p.d./ft. and is based on the published Colorado DWR CDSS GIS layer (see **Figure 3 - Alluvial Aquifer Transmissivity**). The distance to the aquifer boundary was set to 1,400 ft, which is based on the Atlas of Sand, Gravel & Quarry Aggregate Resources, Colorado Front Range. The IDS AWAS output is given in **AII.2 Gardels IDS AWAS Model Output.** The annual net evaporation rate for the Gardels Ponds is calculated to be **19.45 acre-ft./yr.**

2.2 BROWNWOOD PIT

The Brownwood Pit is located in the West 1/2 of Section 19 and in the SW ¼ of Section 20, Township 5 North, Range 68 West of the 6th PM. The site location is shown in **Figure 1 – Locations Map**.

The Brownwood Pit was mined for sand & gravel under the Colorado Division of Reclamation Mining & Safety (DRMS) Permit # M1979-033 between the years of 1979 and 2006. A Temporary Substitute Water Supply Plan (SWSP) has been in effect to date. The site is currently reclaimed and will be released from the DRMS permit upon issuance of the final decreed augmentation plan by water court.

The Brownwood Pit property has been reclaimed to leave one unlined groundwater fed pond with a free water surface area of 12.8 acres (see **Figure 5 – Brownwood Pit Pond Area).** A mining cell in the south east of the property was lined with a compacted clay liner, which was tested for leakage and approved by the Office of the State Engineer (OSE) in October of 2012 (see Appendix I). The Brownwood SE Reservoir is shown in **Figure 18 - Brownwood Reservoir SE.**

The evaporative loss calculations are given in **AI.2 Evaporative Loss Worksheet - Brownwood Pit.** The monthly fraction of annual evaporation is based on the Guidelines for Substitute Water Supply Plans for elevations below 6500 ft published by the OSE. The annual free water surface evaporation is taken from NOAA Technical Report NWS 33 (see **Figure 2 – NOAA TR33 Pan Evaporation**). After applying precipitation credit, the net evaporative depletions were lagged utilizing the IDS AWAS program. Transmissivity was set to 40,137 g.p.d./ft. and is based on the published Colorado DWR CDSS GIS layer (see **Figure 3 - Alluvial Aquifer Transmissivity**). The distance to the aquifer boundary was set to 1,400 ft, which is based on the Atlas of Sand, Gravel & Quarry Aggregate Resources, Colorado Front Range. The IDS AWAS output is given in **AII.3 Brownwood IDS AWAS Model Output.** The annual net evaporation rate for the Brownwood pond is calculated to be **28.32 acre-ft./yr.**

2.3 KIRTRIGHT PIT

The Kirtright Pit is located in the SE ¼ Section 15, Township 5 North, Range 68 West of the 6th PM. The site location is shown in **Figure 1 – Locations Map.**

The Kirtright Pit was mined for sand & gravel under the DRMS Permit # M1986-123 between the years of 1986 and 2007. A SWSP has been in effect to date. The site is currently reclaimed and will be released from the DRMS permit upon issuance of the final decreed augmentation plan by water court.

The Kirtright Pit property has been reclaimed to leave 4 unlined groundwater fed ponds. Ponds 1, 2, 3, and 4 have free water surface areas of 3.51, 1.40, 6.95, and 9.90 acres respectively for a total free water area surface of 21.76 acres (see **Figure 6 - Kirtright Pit Pond Areas)**.

The evaporative loss calculations are given in **AI.3 Evaporative Loss Worksheet - Kirtright Pit.** The monthly fraction of annual evaporation is based on the Guidelines for Substitute Water Supply Plans for elevations below 6500 ft published by the Office of the State Engineer (OSE). The annual free water surface evaporation is taken from NOAA Technical Report NWS 33. (see **Figure 2 – NOAA TR33 Pan Evaporation**). After applying precipitation credit, the net evaporative depletions were lagged utilizing the IDS AWAS program. Transmissivity was set to 20,115 g.p.d./ft. and is based on the published Colorado DWR CDSS GIS layer (see **Figure 3 - Alluvial Aquifer Transmissivity**). The distance to the aquifer boundary was set to 1,400 ft, which is based on the Atlas of Sand, Gravel & Quarry Aggregate Resources, Colorado Front Range. The IDS AWAS output is given in **AII.4 – Kirtright IDS Loss**

AWAS Model Output. The annual net evaporation rate for the Kirtright ponds is calculated to be **48.96 acre-ft./yr.**

2.4 CHALLENGER PIT

The Challenger Pit is located in the West ½ Section 29, Township 5 North, Range 67 West of the 6th PM. The site location is shown in **Figure 1 – Locations Map.**

The Challenger Pit was mined for sand & gravel under the DRMS Permit # M1985-026 between the years of 1987 and 2005. A SWSP has been in effect to date. The site is currently reclaimed and will be released from the DRMS permit upon issuance of the final decreed augmentation plan by water court.

The Challenger Pit property has been reclaimed to leave 3 unlined groundwater fed ponds. Ponds 1, 2 and 3 have free water surface areas of 17.80, 2.30 and 2.60 acres respectively for a total free water area surface of 22.70 acres (see **Figure 7 - Challenger Pit Pond Areas)**.

The evaporative loss calculations are given in **AI.4 Evaporative Loss Worksheet - Challenger Pit.** The monthly fraction of annual evaporation is based on the Guidelines for Substitute Water Supply Plans for elevations below 6500 ft published by the OSE. The annual free water surface evaporation is taken from NOAA Technical Report NWS 33 (see **Figure 2 – NOAA TR33 Pan Evaporation**). After applying precipitation credit, the net evaporative depletions were lagged utilizing the IDS AWAS program. Transmissivity was set to 40,000 g.p.d./ft. and is based on the published Colorado DWR CDSS GIS layer (see **Figure 3 - Alluvial Aquifer Transmissivity**). The distance to the aquifer boundary was set to 1,700 ft, which is based on the Atlas of Sand, Gravel & Quarry Aggregate Resources, Colorado Front Range. The IDS AWAS output is given in **AII.5 Challenger IDS AWAS Model Output.** The annual net evaporation rate for the Challenger ponds is calculated to be **52.77 acre-ft./yr.**

3.0 REPLACEMENT SOURCES

3.1 HILL & BRUSH DITCH CHANGE OF USE

The Hill & Brush (H&B) ditch is the subject water right proposed for change of use from agricultural to augmentation, industrial and mining. The H&B ditch was decreed in 1866 for 61.8010 c.f.s. of which 34.8010 was abandoned in case # 84CW204, leaving 27.0 c.f.s. The historic point of diversion is located in the NE ¼, Section 24, T5N, R68W. (see **Figure 1 – Locations Map**). The original decree is given in Appendix (V).

3.1.1 Historic Consumptive Use Analysis

3.1.1.1 Historic Place of Use

26 shares of H& B Ditch water were used to irrigate the Pfeif/Challenger farm, which was owned and operated by the Pfeif family from 1944-1981. The chain of title is documented by ownership deeds given in **Appendix V.**

The Pfeif/Challenger farm was purchased from Edith Eckman in 1944 by Conrad and Marie Pfeif along with 26 shares of H&B Ditch. The legal description from the 1944 Deed is as follows:

> "The Northwest Quarter (NW ¼) and the North One-half (N ½) of the Southwest Quarter (SW ¼) of Section Twenty-nine (29), Township Five (5) North, Ranger Sixty-seven (67) West of the Sixth Principal Meridian. together with twenty-six (26) shares of the capital stock of the Hill and Brush Ditch Company, the Adams Seepage Ditch, and all other water, ditch and lateral rights appertaining to said premises. Excepting from the above described premises rights of way for roads and ditches as now constructed, and excepting a tract containing one acre in the Northeast corner of the Northwest Quarter (NW 1/4) of said Section Twenty-nine (29) heretofore conveyed to School District Number 7 of Weld County, Colorado, and except that part of the. above described premises heretofore conveyed to the Union Pacific Railway Company by deed recorded in Book 316 at page 53, Weld County, Colorado, records."

Conrad Pfeif then deeded the farm to Joseph and Olinda Pfeif in 1960. Joseph Pfeif the sold to Doyle Koehn in 1981 and in that same year (1981) Koehn sold to Albert Challenger. In 1986 permits for the Challenger Pit were finalized to mine approximately 105 acres of the irrigated farmland for sand & gravel (Permit # M1985-026). Mining of the farm began in 1987. The Pfeif farm was subsequently subdivided into Heritage Crossing PUD and Lakota lakes PUD and recorded exemptions for the parcels north of the railroad easement. Of the original Pfeif farm 26 shares of H&B ditch, 19 are owned by CEC, 3 by Lakota Lakes land owners, 2 by a Heritage Crossing Land owners and 2 by Siskowski.

3.1.1.2 Historic Crop Rotation

The historic crop rotation was determined by interview with Jim Croissant (current H&B Ditch president), historic farm loan documents and historic aerial photographs. It is understood that the Pfeif's were primarily in the business of farming cattle and as such, the crops grown were used to feed the cattle. The historic crop rotation and acreages are given in **Table 3.1.1.2-1** below.

Table 3.1.1.2-1. Historic Crop Rotation for the Pfeif Farm 1950-1986

1950-1968 **19 years**

	Field #1	Field #2	Field #3	Field #4	Field #5	Field #6	Field #7	Totals
Silage Corn		44.4	6.1	8.9	10.2			69.6
								0.0
Alfalfa	9.3							9.3
								0.0
Pasture Grass						29.1	17.5	46.6
								125.5

1969-1983 **15 years**

	Field #1	Field #2	Field #3	Field #4	Field #5	Field #6	Field #7	Totals
Silage Corn	9.9		6.1	8.9				24.9
								0.0
Alfalfa		46.0			7.9			53.9
								0.0
Pasture Grass						25.8	17.9	43.7
								122.5

1984-1986 **3 years**

	Field #1	Field #2	Field #2a	Field #3	Field #4	Field #5	Field #6	Field #7	Totals
Silage Corn	10.8		10.1	6.1	8.9				35.9
									0.0
Alfalfa		15.1				7.7			22.8
									0.0
Pasture Grass							45.0	17.5	62.5
									121.2

Weighted Average for 37 years = 123.94 acres

The period of record for the HCU analysis is from 1950 through1985.

3.1.1.3 Pfeif/Challenger Farm IDS Consumptive Use Model

The Integrated Decision Support (IDS) Consumptive use Model ver. 3.3.151 was used to model the historic consumptive use of irrigated crops on the Pfeif farm from 1950-1986. The model was linked to the Colorado Division of Water Resources (DWR) Hydrobase database and queried for Hill & Brush diversions codes S1, U1 (natural streamflow, irrigation use). The headgate diversions are given in **AIII.1 - Total Hill & Brush Diversions at River Headgate 1950-1986 (S:1, U:1)**. The pro-rata diversions for the Pfeif farm were calculated by multiplying the values in AIII.1 by 26 shares /128 shares (0.2031) and subtracting 5% for ditch loss. The Pfeif farm north H&B headgate occurs 1.7 miles from the H&B river headgate and the south H&B farm headgate occurs 2.3 miles from the river headgate.

Weather data including; frost dates, mean monthly temperature, mean monthly max. temperature and mean monthly min. temperature and precipitation was similarly queried from Hydrobase for the for the Fort Collins Weather Station. Fort Collins was found to have the most complete historic weather data closest to the site. Missing values in weather tables were filled in by interpolating between the nearest days.

Crop growth coefficients and characteristics were also queried from the DWR Hydrobase. The soil moisture holding capacity parameter was set at 1.92 inch/foot. This value was taken from the NRCS Soil survey **(see Appendix AIII.7 NRCS Soil Survey Available Water Capacity Pfeif/Challenger Farm).**

The model was run with the Blaney-Criddle method for calculating Evapotranspiration (ET). precipitation was set to 70% effective.

The IDS CU model output is given in **AIII.4 Challenger/ Pfief Farm IDSCU Historic Consumptive Use Model Output 1950-1986** for each month from 1950-1986 for the farm. The average monthly HCU and return flow obligations are given in AIII.5 Out of the total return flows, it is assumed that 50% of the return flows are deep percolation to groundwater and 50% are surface runoff. The deep percolation flows have been lagged utilizing the IDS AWAS program. The IDS AWAS model output is given in **AIII.6 Challenger/ Pfief Farm Average Historic Deep Percolation IDS AWAS Output.**

3.2 OSBORN IRRIGATION SYSTEM CHANGE OF USE

The Osborn Irrigation System (OIS) is the subject water right proposed for change of use from agricultural to augmentation and industrial/mining. The OIS ditch was decreed in 1939 for 1.07 c.f.s. (Admin. No. 29675.14245) in water court case No. CA10077. The OIS water right consists of an equalizer pond and a ditch consisting of four connecting sections, identified as Ditches Nos. 1,2,3 and 4. The OIS derives its water supply from five seepage sources. The seepage sources are tributary to the Big Thompson River. The OIS occurs in the North ½ of Section 19, T5N, R68W. The layout of the OIS based on the legal descriptions in the Decree is shown in **Figure 12 – Osborn Irrigation System**. The original decree is given in Appendix (V).

3.2.1 Historic Consumptive Use Analysis

3.2.1.1 Historic Place of Use

Judge W.B. Osborn and his wife Margaret established the farm in the valley along the Big Thompson River in 1860 on 160 acres of land in the north ½ of Section 19, T5N, R68W. Milo Kenneth Osborn took over the farm from his father W.B. Osborn and went on to decree the Osborn Irrigation System in 1939. Louise Osborn Gardels inherited the farm from Milo Kenneth in 1971. Mrs. Gardels continued to farm the land with her son until the 1990's when her son passed away. She then subdivided the high ground and continued to lease the bottom lands along the river to local farmers. In 2006 the bottom lands along the river were leased to CEC for sand and gravel mining.

The Osborn Irrigation system has been mapped based on the legal descriptions given in the decree as shown in **Figure 12 - Osborn Irrigation System.** As a note of interest, Kenneth Milo had a degree from Colorado A& M in engineering as is evident in his detailed descriptions of the seeps and conveyance systems in the decree. As is evident from **Figure 12 - Osborn Irrigation System**, there are two distinctive terraces of land separated by a hillslope. The upper lands occur under the Loveland & Greely Canal and Farmers Ditch and were irrigated with 85" of Chubbuck and 1 share of Ryan Gulch Reservoir. The Chubbuck water was run through the Greeley & Loveland Canal and the Ryan Gulch through the Farmers Ditch.

The bottom lands in include approximately 28.3 acres of irrigated land.

Title documents for the Osborn farm are given in **Appendix V.**

3.2.1.2 Historic Crop Rotation

The historic crop rotation was determined by interview with Dale Osborn and historic aerial photographs. **Figures 13-16 Osborn Farm Irrigated Acreage 1953-2005** provide aerial photographic evidence of historic irrigated lands. It is understood that the Osborn farm was used to grow feed for cattle and therefore the main crops were silage corn and alfalfa and pasture grass. The historic crop rotation used in the model are given below in **Table 4.2.2-1 Historic Crop Rotation for the Osborn Farm 1950-2006** below.

Table 4.2.2-1 Historic Crop Rotation for the Osborn Farm 1950-2006

1950-2006

	Field #1	Field #2	Field #3
Silage Corn			10.9
Alfalfa		9.06	
Pasture Grass	8.34		

Average for 57 years = 28.25 acres

The period of record for the HCU analysis is from 1950 through 2006.

3.2.1.3 Osborn Farm IDS Consumptive Use Model

The Integrated Decision Support (IDS) Consumptive Use Model ver. 3.3.151 was used to model the historic consumptive use of irrigated crops on the Osborn farm from 1950-2006.

Due to the fact that historical records of irrigation water volumetric flow rates for the OIS were not kept, the following method was used to determine water available for consumptive use by the crops: First, I made a historic determination of number of days in a given year/month that the OIS would have been in priority by querying DWR Division 1 call records for the period of 1950-2006 (see **AIV.1 Osborn Irrigation System Historic Days in Priority 1950-2006**). The days in priority were then multiplied by the volumetric flow rates defined in the decree, with 0.37 c.f.s. assigned to the west field and 0.7 c.f.s. was applied to the east fields. The resulting tables are given in **AIV.2. Osborn Irrigation System Historic Monthly Water Available for Consumptive Use – West Field** and **AIV.3. Osborn Irrigation System Historic Monthly Water Available for Consumptive Use – East Field**.

Weather data including; frost dates, mean monthly temperature, mean monthly max. temperature and mean monthly min. temperature and precipitation was similarly queried from Hydrobase for the for the Fort Collins Weather Station. Fort Collins was found to have the most complete historic weather data closest to the site. Missing values in weather tables were filled in by interpolating between the nearest days.

Crop growth coefficients and characteristics were also queried from the DWR Hydrobase.

The model was run with The Blaney-Criddle method for Evapotranspiration (ET). Precipitation was set to 70% effective.

The IDS CU model outputs are given in **AIV.4. Osborn Farm IDSCU Historic Consumptive Use Model Output 1950-2006 – West Field**, **AIV.5. Osborn**

Farm Historic Consumptive Use Summary Table 1950-2006 – West Field, AIV.6. Osborn Farm Historic Net Deep Percolation and Runoff Summary Table 1950-2006 – West Field, **AIV.7. Osborn Farm IDSCU Historic Consumptive Use Model Output 1950-2006 – East Field, AIV.8. Osborn Farm Historic Consumptive Use Summary Table 1950-2006 – East Field** and **AIV.9. Osborn Farm Historic Net Deep Percolation and Runoff Summary Table 1950-2006 – East Field.** A summary of the average Historic Consumptive use (HCU) for the farm is given in **AIV.10. Osborn Farm Total Average Historic Consumptive Use.** Return flow obligations for the change of use are based on the assumption that 50% of the return flows are deep percolation to groundwater and 50% are surface runoff (see **AIV.11. Osborn Farm Total Return Flow Obligation Worksheet**). The deep percolation flows have been lagged utilizing the IDS AWAS program. The IDS AWAS model output is given in **AIV.12. Osborn Farm Average Historic Deep Percolation IDS AWAS Output.**

3.3 2019 BIG THOMPSON RIVER WATER RIGHT CLAIM

3.3.1 Needs Analysis and Uses

CEC has the need for industrial water to operate their ongoing Sand & Gravel (S&G) mining operations on the Big Thompson River as well as provide augmentation water for groundwater exposed at the Gardels Pit, Kirtright Pit, Brownwood Pit, and Challenger Pit identified above. Additional uses include recreation, piscatorial and wildlife.

3.3.2 Points of Diversion

1. Big Thompson Ditch & Manufacturing Co. (BTD&M) Ditch Headgate; NE ¼ of the SW ¼, S15, T5N, R68W

   5 c.f.s absolute, 10 c.f.s. conditional.

2. A new headgate on the Big Thompson River located in the SE ¼ of the SE ¼ Section 19, T5N,R68W, 10 c.f.s. conditional

3. The Hill and Brush Ditch headgate located in the SW ¼ of the NE ¼, Section 24, T5N, R68W for 5.4837 c.f.s. absolute and 10 c.f.s. conditional.

4. A new headgate on the Big Thompson River located in the SW ¼ of the SW ¼ , Section 19, T5N,R68W for 20 c.f.s. conditional.

For the purpose of demonstrating that water would be available for completion of the appropriations, a historical free river analysis was conducted at the proposed point of diversion, which is the headgate of the Big Thompson Ditch & Mfg. Co. (BTD&M) (SE ¼ of Section 15, Township 1N, Range 69W). I selected the period of record from 2004 - 2017 for the analysis. This period was selected due to the fact that the DWR did not record tributary calls prior to 2004. The methodology used for determining free river days is as follows. I obtained the South Platte call chronologies from the DWR for all of Division 1. I determined free river days by tabulating the absence of a calls on all downstream water rights including District 4 (downstream of BTD&M), District 2 (downstream of St. Big Thompson and S. Platte and all of Districts 1 and 64). In general, free river mostly occurred in the spring runoff months of April-June. The number of free river days for the months of April, May, and June is given in **Table 3.3.2 -1 Monthly Number of Free River Day Big Thompson River 2003-2017**.

Table 3.3.2 -1 Monthly Number of Free River Day Big Thompson River 2003-2017

Year	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
2003	0	0	0	0	0	17	0	0	12	19	0	0	48
2004	0	0	0	0	0	0	0	0	0	6	0	0	6
2005	0	0	0	25	7	23	0	1	0	21	0	0	77
2006	13	6	17	9	0	0	0	0	0	0	0	9	54
2007	9	6	8	19	30	13	0	0	0	0	0	15	100
2008	20	3	12	14	0	0	0	2	0	0	0	0	51
2009	0	0	27	26	0	0	0	0	0	30	29	30	142
2010	31	10	27	25	30	26	0	0	0	18	0	0	167
2011	29	28	30	9	12	29	21	0	7	30	29	30	254
2012	31	29	31	7	0	0	22	0	0	0	0	0	120
2013	0	0	0	14	9	0	0	0	18	31	30	30	132
2014	31	28	31	28	10	30	0	14	25	31	30	30	288
2015	31	28	31	21	31	30	15	0	0	20	30	31	268
2016	31	29	31	30	31	26	0	0	0	0	0	21	199
2017	31	20	13	0	13	19	0	0	0	22	0	16	134

3.4 STORAGE RESERVOIRS

3.4.1 Gardels West Reservoir

The Gardels West Reservoir (GWR) is a 3.3 acre clay lined reservoir with a volumetric capacity of 24 acre-ft. The compacted clay liner has been tested for leakage and the SEO issued a leak test approval letter on October 4, 2012 (see Appendix I). This Reservoir will be used to firm the yield of the Osborn Irrigation System water right described above and manage non-irrigation season return flows.

3.4.2 Brownwood SE Reservoir

The Brownwood SE Reservoir (BRSE) is a 11.13 acre clay lined reservoir with a volumetric capacity of 120.12 acre-ft. The compacted clay liner has been tested for leakage and the SEO issued a leak test approval letter on October 4, 2012 (see Appendix I). This Reservoir will be used to store the 2019 water right claim identified above. Division 1 of the SEO has approved accounting for the reservoir and it has been used to store free river diversions since October 2015.

3.4.3 Amen Reservoirs

The Amen Aggregate Resource is a proposed sand & gravel mining operation located in the South ½ of Section 19, T5N, R67W (see **Figure 1 – Site Locations**). Permitting of the mine is expected to be complete in the Spring of 2019. The reclamation plan will leave five reservoirs (Ponds) as shown in **Figure 19 Proposed Amen Reservoirs, Sheets 1,2**. The water storage capacity for each reservoir is given below in **Table 4.4.3-1 Amen Reservoirs Summary** The combined water storage capacity for the 5 reservoirs is 479 acre-ft.

Table 3.4.3-1 Amen Reservoirs Summary

Description	Area	Volume
Pond 1	11.2	101
Pond 2	6.8	36
Pond 3	4.7	31
Pond 4	26.2	234
Pond 5	12.2	77
totals	61.1	479

The proposed Amen Reservoirs occur under the Hill & Brush Ditch and aside from capturing and storing the 2019 water right claim, they will be used to manage deliveries of non-irrigation season return flows.

4.0 PLAN OPERATION

4.1 REPLACEMENT OF DEPLETIONS FROM UPSTREAM PONDS

The upstream ponds include the Gardels Ponds 1 and 2 and the Brownwood Pond. Replacements for depletions from the upstream ponds include direct flow water from the changed OIS water right and storage water from the 2019 Brownwood Reservoir SE storage claim. The Brownwood Reservoir SE will also be used to manage excess OIS HCU credits. The monthly potential depletions from the ponds will be replaced in time, place and amount by the replacement quantities shown **AVI.1 Net Depletions and Replacements Upstream Ponds.**

Replacement deliveries will be made to the Big Thompson River just north of the Brownwood SE Reservoir. Accounting of depletions and replacements will be developed and approved by the Division 1 Engineer and submitted monthly to the same.

4.2 REPLACEMENT OF DEPLETIONS FROM DOWNSTREAM PONDS

The downstream ponds include the Kirtright Ponds 1,2,3, and 4 and the Challenger Ponds 1,2, and 3. Replacements for depletions from the downstream ponds include direct flow water from the changed Hill & Brush Ditch water right and storage water from the 2019 Amen Reservoirs storage claim. The Amen Reservoirs will also be used to manage excess Hill & Brush HCU credits. Prior to the construction of the Amen Reservoirs, CEC will operate the plan with replacement water from CEC's 100 acre-ft/year lease with the City of Loveland for fully consumable WWTP effluent delivered at the approximate location of the Brownwood / Gardels sites. The monthly potential depletions from the ponds will be replaced in time, place and amount by the replacement quantities shown **AVI.2 Net Depletions and Replacements Downstream Ponds.**

Replacement deliveries will be made to the Big Thompson River just north of the Amen Reservoir (Pond 4). Accounting of depletions and replacements will be developed and approved by the Division 1 Engineer and submitted monthly to the same.

5.0 SUMMARY AND CONCLUSIONS

The completion of mining and reclamation of four sand and gravel operations along the Big Thompson river in Larimer and Weld Counties has left behind several gravel ponds for which the projected evaporative depletions to tributary groundwater have be quantified. For the purpose of preventing injury to any downstream water rights, this plan will replace in amount, time and location all projected evaporative depletions. Replacement sources include the changed Hill & Brush water right, the changed Osborn Irrigation System water right, a 2019 Big Thompson river Brownwood Reservoir SE storage and direct flow water right and a 2019 Big Thompson river storage and direct flow water right.

The quantification of the projected firm yields of the replacement water rights together with the ability to manage administration of replacements with water storage, demonstrates that these water rights can and will be provided in the amount, time, and location required for replacement of out of priority depletions. This augmentation plan will therefore prevent injury to any water rights downstream on the Big Thompson and S. Platte rivers in Water Districts 64,1,2 and 4.

The administration and accounting of the plan will be developed with standard engineering practices and approved by the Division 1 engineer prior shortly after adjudication of this plan and associated water rights claims and changes of use.

6.0 REFERENCES

IDS AWAS ***Integrated Decision Support Alluvial Water Accounting System Model.*** 10-15-2014 Version 1.5.85. http://www.ids.colostate.edu/projects.php?project=awas

IDS-CU - ***Integrated Decision Support Consumptive Use Model.*** 7-24-2016 Version 3.3.160. http://www.ids.colostate.edu/projects.php?project=idscu&breadcrumb=IDSCU

Schwochow, S. D., R. R. Shroba, and P. C. Wicklein. 1974 "***SP-05-B Sand, Gravel, and Quarry Aggregate Resources Colorado Front Range Counties."*** Aggregate Resources. Special Publication. Denver, CO: Colorado Geological Survey, Department of Natural Resources.

Colorado Division of Water Resources ***Online Map Viewer Groundwater Transmissivity GIS Layer ,*** December 2018 download

https://gis.colorado.gov/dnrviewer/Index.html?viewer=mapviewer

APPENDIX I

Pond 1 Surface Area: 6.80 acres

Month	(1) Monthly Distribution	(2) Free Water Surface Evaporation [ft./yr.]	(3) Gross Evaporation Rate [ft./mo.]	(4) Surface Area [acres]	(5) Gross Evaporation [acre-ft./mo.]	(6) Average Monthly Precip. [ft./mo.]	(7) Effective Precip. Credit [acre-ft./mo.]	(8) Net Evaporative Loss (unlagged) [acre-ft./mo.]	(9) Net Evaporative Loss (lagged) [acre-ft./mo.]
Jan	0.030	3.270	0.098	6.80	0.00	0.04	0.00	0.00	0.32
Feb	0.035	3.270	0.114	6.80	0.78	0.05	0.24	0.54	0.44
Mar	0.055	3.270	0.180	6.80	1.22	0.12	0.57	0.65	0.56
Apr	0.090	3.270	0.294	6.80	2.00	0.17	0.81	1.19	0.85
May	0.120	3.270	0.392	6.80	2.67	0.22	1.05	1.62	1.22
June	0.145	3.270	0.474	6.80	3.22	0.14	0.67	2.55	1.83
Jul	0.150	3.270	0.491	6.80	3.34	0.13	0.62	2.72	2.25
Aug	0.135	3.270	0.441	6.80	3.00	0.11	0.52	2.48	2.34
Sep	0.100	3.270	0.327	6.80	2.22	0.13	0.62	1.60	1.98
Oct	0.070	3.270	0.229	6.80	1.56	0.10	0.48	1.08	1.54
Nov	0.040	3.270	0.131	6.80	0.89	0.06	0.29	0.60	1.10
Dec	0.030	3.270	0.098	6.80	0.00	0.05	0.00	0.00	0.60
totals			3.270		20.90	1.32	5.87	15.03	15.03

Notes:

(1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.

(2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0. See Figure 2 - NOAA TR33 Class A Pan Evaporation.

(3) = Column (1) * Column (2).

(4) = Total Free Water Surface Area (see Figure 4 - Gardels Pit Pond Areas).

(5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.

(6) = From AII.1 Precipitation Data.

(7) = (Column (6) * 70%) * Column (4)

(8) = Column (5) -Column (7).

(9) = Column (8) Lagged utilizing AWAS program (See AII.2).

Pond 2 Surface Area: 2.00 acres

Month	(1) Monthly Distribution	(2) Free Water Surface Evaporation [ft./yr.]	(3) Gross Evaporation Rate [ft./mo.]	(4) Surface Area [acres]	(5) Gross Evaporation [acre-ft./mo.]	(6) Average Monthly Precip. [ft./mo.]	(7) Effective Precip. Credit [acre-ft./mo.]	(8) Net Evaporative Loss (unlagged) [acre-ft./mo.]	(9) Net Evaporative Loss (lagged) [acre-ft./mo.]	(10) Net Evaporative Loss (lagged) Pond 1 + 2 [acre-ft/mo.]
Jan	0.030	3.270	0.098	2.00	0.00	0.04	0.00	0.00	0.06	**0.38**
Feb	0.035	3.270	0.114	2.00	0.23	0.05	0.07	0.16	0.14	**0.58**
Mar	0.055	3.270	0.180	2.00	0.36	0.12	0.17	0.19	0.17	**0.73**
Apr	0.090	3.270	0.294	2.00	0.59	0.17	0.24	0.35	0.28	**1.13**
May	0.120	3.270	0.392	2.00	0.78	0.22	0.31	0.47	0.39	**1.61**
June	0.145	3.270	0.474	2.00	0.95	0.14	0.20	0.75	0.61	**2.44**
Jul	0.150	3.270	0.491	2.00	0.98	0.13	0.18	0.80	0.71	**2.96**
Aug	0.135	3.270	0.441	2.00	0.88	0.11	0.15	0.73	0.70	**3.04**
Sep	0.100	3.270	0.327	2.00	0.65	0.13	0.18	0.47	0.55	**2.53**
Oct	0.070	3.270	0.229	2.00	0.46	0.10	0.14	0.32	0.41	**1.95**
Nov	0.040	3.270	0.131	2.00	0.26	0.06	0.08	0.18	0.28	**1.38**
Dec	0.030	3.270	0.098	2.00	0.00	0.05	0.00	0.00	0.12	**0.72**
totals			3.270		6.14	1.32	1.72	4.42	4.42	**19.45**

Notes:

(1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.

(2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0. See Figure 2 - NOAA TR33 Class A Pan Evaporation.

(3) = Column (1) * Column (2).

(4) = Total Free Water Surface Area (see Figure 4 - Gardels Pit Pond Areas).

(5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.

(6) = From AII.1 Precipitation Data.

(7) = (Column (6) * 70%) * Column (4)

(8) = Column (5) -Column (7).

(9) = Column (8) Lagged utilizing AWAS program (See AII.2).

(10) = Pond 1, Column (9) + Pond 2, Column (9).

AI.2 Evaporative Loss Worksheet - Brownwood Pit

Pond Surface Area: *12.80* *acres*

Month	(1) Monthly Distribution	(2) Free Water Surface Evaporation [ft./yr.]	(3) Gross Evaporation Rate [ft./mo.]	(4) Surface Area [acres]	(5) Gross Evaporation [acre-ft./mo.]	(6) Average Monthly Precip. [ft./mo.]	(7) Effective Precip. Credit [acre-ft./mo.]	(8) Net Evaporative Loss (unlagged) [acre-ft./mo.]	(9) Net Evaporative Loss (lagged) [acre-ft./mo.]
Jan	0.030	3.270	0.098	12.80	0.00	0.04	0.00	0.00	0.77
Feb	0.035	3.270	0.114	12.80	1.46	0.05	0.45	1.01	1.05
Mar	0.055	3.270	0.180	12.80	2.30	0.12	1.08	1.22	1.31
Apr	0.090	3.270	0.294	12.80	3.77	0.17	1.52	2.25	1.81
May	0.120	3.270	0.392	12.80	5.02	0.22	1.97	3.05	2.41
June	0.145	3.270	0.474	12.80	6.07	0.14	1.25	4.82	3.43
Jul	0.150	3.270	0.491	12.80	6.28	0.13	1.16	5.12	4.10
Aug	0.135	3.270	0.441	12.80	5.65	0.11	0.99	4.66	4.16
Sep	0.100	3.270	0.327	12.80	4.19	0.13	1.16	3.03	3.47
Oct	0.070	3.270	0.229	12.80	2.93	0.10	0.90	2.03	2.67
Nov	0.040	3.270	0.131	12.80	1.67	0.06	0.54	1.13	1.97
Dec	0.030	3.270	0.098	12.80	0.00	0.05	0.00	0.00	1.17
totals			3.270		39.34	1.32	11.02	28.32	28.32

Notes:

(1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.

(2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0. See Figure 2 - NOAA TR33 Class A Pan Evaporation.

(3) = Column (1) * Column (2).

(4) = Total Free Water Surface Area (see Figure 5 - Brownwood Pit Pond Area).

(5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.

(6) = From AII.1 Precipitation Data.

(7) = (Column (6) * 70%) * Column (4)

(8) = Column (5) -Column (7).

(9) = Column (8) Lagged utilizing AWAS program (See AII.3).

Pond 1 Surface Area: 3.51 acres

Month	(1) Monthly Distribution	(2) Free Water Surface Evaporation [ft./yr.]	(3) Gross Evaporation Rate [ft./mo.]	(4) Surface Area [acres]	(5) Gross Evaporation [acre-ft./mo.]	(6) Average Monthly Precip. [ft./mo.]	(7) Effective Precip. Credit [acre-ft./mo.]	(8) Net Evaporative Loss (unlagged) [acre-ft./mo.]	(9) Net Evaporative Loss (lagged) [acre-ft./mo.]
Jan	0.030	3.310	0.099	3.51	0.00	0.04	0.00	0.00	0.45
Feb	0.035	3.310	0.116	3.51	0.41	0.05	0.12	0.29	0.40
Mar	0.055	3.310	0.182	3.51	0.64	0.12	0.29	0.35	0.43
Apr	0.090	3.310	0.298	3.51	1.05	0.17	0.42	0.63	0.48
May	0.120	3.310	0.397	3.51	1.39	0.22	0.54	0.85	0.56
June	0.145	3.310	0.480	3.51	1.68	0.14	0.34	1.34	0.70
Jul	0.150	3.310	0.497	3.51	1.74	0.13	0.32	1.42	0.86
Aug	0.135	3.310	0.447	3.51	1.57	0.11	0.27	1.30	0.96
Sep	0.100	3.310	0.331	3.51	1.16	0.13	0.32	0.84	0.94
Oct	0.070	3.310	0.232	3.51	0.81	0.10	0.25	0.56	0.83
Nov	0.040	3.310	0.132	3.51	0.46	0.06	0.15	0.31	0.71
Dec	0.030	3.310	0.099	3.51	0.00	0.05	0.00	0.00	0.57
totals			3.310		10.91	1.32	3.02	7.89	7.89

Notes:

(1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.

(2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0. See Figure 2 - NOAA TR33 Class A Pan Evaporation.

(3) = Column (1) * Column (2).

(4) = Total Free Water Surface Area (see Figure 6 - Kirtright Pond Areas).

(5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.

(6) = From AII.1 Precipitation Data.

(7) = (Column (6) * 70%) * Column (4)

(8) = Column (5) -Column (7).

(9) = Column (8) Lagged utilizing AWAS program (See AII.4).

Pond 2 Surface Area: 1.40 acres

Month	(1) Monthly Distribution	(2) Free Water Surface Evaporation [ft./yr.]	(3) Gross Evaporation Rate [ft./mo.]	(4) Surface Area [acres]	(5) Gross Evaporation [acre-ft./mo.]	(6) Average Monthly Precip. [ft./mo.]	(7) Effective Precip. Credit [acre-ft./mo.]	(8) Net Evaporative Loss (unlagged) [acre-ft./mo.]	(9) Net Evaporative Loss (lagged) [acre-ft./mo.]
Jan	0.030	3.310	0.099	1.40	0.00	0.04	0.00	0.00	0.23
Feb	0.035	3.310	0.116	1.40	0.16	0.05	0.05	0.11	0.20
Mar	0.055	3.310	0.182	1.40	0.25	0.12	0.12	0.13	0.20
Apr	0.090	3.310	0.298	1.40	0.42	0.17	0.17	0.25	0.20
May	0.120	3.310	0.397	1.40	0.56	0.22	0.22	0.34	0.21
June	0.145	3.310	0.480	1.40	0.67	0.14	0.14	0.53	0.24
Jul	0.150	3.310	0.497	1.40	0.70	0.13	0.13	0.57	0.28
Aug	0.135	3.310	0.447	1.40	0.63	0.11	0.11	0.52	0.32
Sep	0.100	3.310	0.331	1.40	0.46	0.13	0.13	0.33	0.35
Oct	0.070	3.310	0.232	1.40	0.32	0.10	0.10	0.22	0.33
Nov	0.040	3.310	0.132	1.40	0.19	0.06	0.06	0.13	0.30
Dec	0.030	3.310	0.099	1.40	0.00	0.05	0.00	0.00	0.27
totals			3.310		4.36	1.32	1.23	3.13	3.13

Notes:

(1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.

(2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0. See Figure 2 - NOAA TR33 Class A Pan Evaporation.

(3) = Column (1) * Column (2).

(4) = Total Free Water Surface Area (see Figure 6 - Kirtright Pond Areas).

(5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.

(6) = From AII.1 Precipitation Data.

(7) = (Column (6) * 70%) * Column (4)

(8) = Column (5) -Column (7).

(9) = Column (8) Lagged utilizing AWAS program (See AII.4).

Pond 3 Surface Area: 6.95 acres

Month	(1) Monthly Distribution	(2) Free Water Surface Evaporation [ft./yr.]	(3) Gross Evaporation Rate [ft./mo.]	(4) Surface Area [acres]	(5) Gross Evaporation [acre-ft./mo.]	(6) Average Monthly Precip. [ft./mo.]	(7) Effective Precip. Credit [acre-ft./mo.]	(8) Net Evaporative Loss (unlagged) [acre-ft./mo.]	(9) Net Evaporative Loss (lagged) [acre-ft./mo.]
Jan	0.030	3.310	0.099	6.95	0.00	0.04	0.00	0.00	1.08
Feb	0.035	3.310	0.116	6.95	0.81	0.05	0.24	0.57	0.96
Mar	0.055	3.310	0.182	6.95	1.27	0.12	0.58	0.69	0.95
Apr	0.090	3.310	0.298	6.95	2.07	0.17	0.83	1.24	0.98
May	0.120	3.310	0.397	6.95	2.76	0.22	1.07	1.69	1.08
June	0.145	3.310	0.480	6.95	3.34	0.14	0.68	2.66	1.25
Jul	0.150	3.310	0.497	6.95	3.45	0.13	0.63	2.82	1.50
Aug	0.135	3.310	0.447	6.95	3.11	0.11	0.54	2.57	1.68
Sep	0.100	3.310	0.331	6.95	2.30	0.13	0.63	1.67	1.74
Oct	0.070	3.310	0.232	6.95	1.61	0.10	0.49	1.12	1.65
Nov	0.040	3.310	0.132	6.95	0.92	0.06	0.29	0.63	1.49
Dec	0.030	3.310	0.099	6.95	0.00	0.05	0.00	0.00	1.30
totals			3.310		21.64	1.32	5.98	15.66	15.66

Notes:

(1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.

(2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0. See Figure 2 - NOAA TR33 Class A Pan Evaporation.

(3) = Column (1) * Column (2).

(4) = Total Free Water Surface Area (see Figure 6 - Kirtright Pond Areas).

(5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.

(6) = From AII.1 Precipitation Data.

(7) = (Column (6) * 70%) * Column (4)

(8) = Column (5) -Column (7).

(9) = Column (8) Lagged utilizing AWAS program (See AII.4).

Pond 4 Surface Area: 9.90 acres

Month	(1) Monthly Distribution	(2) Free Water Surface Evaporation [ft./yr.]	(3) Gross Evaporation Rate [ft./mo.]	(4) Surface Area [acres]	(5) Gross Evaporation [acre-ft./mo.]	(6) Average Monthly Precip. [ft./mo.]	(7) Effective Precip. Credit [acre-ft./mo.]	(8) Net Evaporative Loss (unlagged) [acre-ft./mo.]	(9) Net Evaporative Loss (lagged) [acre-ft./mo.]
Jan	0.030	3.310	0.099	9.90	0.00	0.04	0.00	0.00	1.56
Feb	0.035	3.310	0.116	9.90	1.15	0.05	0.35	0.80	1.38
Mar	0.055	3.310	0.182	9.90	1.80	0.12	0.83	0.97	1.36
Apr	0.090	3.310	0.298	9.90	2.95	0.17	1.18	1.77	1.40
May	0.120	3.310	0.397	9.90	3.93	0.22	1.52	2.41	1.54
June	0.145	3.310	0.480	9.90	4.75	0.14	0.97	3.78	1.76
Jul	0.150	3.310	0.497	9.90	4.92	0.13	0.90	4.02	2.11
Aug	0.135	3.310	0.447	9.90	4.42	0.11	0.76	3.66	2.37
Sep	0.100	3.310	0.331	9.90	3.28	0.13	0.90	2.38	2.47
Oct	0.070	3.310	0.232	9.90	2.29	0.10	0.69	1.60	2.34
Nov	0.040	3.310	0.132	9.90	1.31	0.06	0.42	0.89	2.13
Dec	0.030	3.310	0.099	9.90	0.00	0.05	0.00	0.00	1.86
totals			3.310		30.80	1.32	8.52	22.28	22.28

Notes:

(1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.

(2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0. See Figure 2 - NOAA TR33 Class A Pan Evaporation.

(3) = Column (1) * Column (2).

(4) = Total Free Water Surface Area (see Figure 6 - Kirtright Pond Areas).

(5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.

(6) = From AII.1 Precipitation Data.

(7) = (Column (6) * 70%) * Column (4)

(8) = Column (5) -Column (7).

(9) = Column (8) Lagged utilizing AWAS program (See AII.4).

Month	(1) Net Evaporative Loss (lagged) Pond 1	(2) Net Evaporative Loss (lagged) Pond 2	(3) Net Evaporative Loss (lagged) Pond 3	(4) Net Evaporative Loss (lagged) Pond 4	(5) **Total Net Evaporative Loss (lagged)**
	[acre-ft.]	[acre-ft.]	[acre-ft.]	[acre-ft.]	**[acre-ft.]**
Jan	0.00	0.00	0.00	0.00	**0.00**
Feb	0.29	0.11	0.57	0.80	**1.77**
Mar	0.35	0.13	0.69	0.97	**2.14**
Apr	0.63	0.25	1.24	1.77	**3.89**
May	0.85	0.34	1.69	2.41	**5.29**
June	1.34	0.53	2.66	3.78	**8.31**
Jul	1.42	0.57	2.82	4.02	**8.83**
Aug	1.30	0.52	2.57	3.66	**8.05**
Sep	0.84	0.33	1.67	2.38	**5.22**
Oct	0.56	0.22	1.12	1.60	**3.50**
Nov	0.31	0.13	0.63	0.89	**1.96**
Dec	0.00	0.00	0.00	0.00	**0.00**
totals	7.89	3.13	15.66	22.28	**48.96**

Notes:

(1) = Column (9) from Pond 1
(2) = Column (9) from Pond 2
(3) = Column (9) from Pond 3
(4) = Column (9) from Pond 4
(5) = Column (1) + Column (2) + Column (3) + Column (4)

Pond 1

Area of Exposed Groundwater: 17.80 acres

Month	(1) Monthly Distribution	(2) Free Water Surface Evaporation [ft./yr.]	(3) Gross Evaporation Rate [ft./mo.]	(4) Surface Area [acres]	(5) Gross Evaporation Volumetric Flow [acre-ft./mo.]	(6) Average Monthly Precip. [ft.]	(7) Effective Precip. Credit [acre-ft.]	(8) Net Evaporative Loss (unlagged) [acre-ft.]	(9) Net Evaporative Loss (lagged) [acre-ft.]
Jan	0.030	3.390	0.102	17.80	0.00	0.04	0.00	0.00	0.77
Feb	0.035	3.390	0.119	17.80	2.11	0.05	0.62	1.49	1.00
Mar	0.055	3.390	0.186	17.80	3.32	0.12	1.50	1.82	1.43
Apr	0.090	3.390	0.305	17.80	5.43	0.17	2.12	3.31	2.26
May	0.120	3.390	0.407	17.80	7.24	0.22	2.74	4.50	3.33
June	0.145	3.390	0.492	17.80	8.75	0.14	1.74	7.01	5.00
Jul	0.150	3.390	0.509	17.80	9.05	0.13	1.62	7.43	6.26
Aug	0.135	3.390	0.458	17.80	8.15	0.11	1.37	6.78	6.59
Sep	0.100	3.390	0.339	17.80	6.03	0.13	1.62	4.41	5.68
Oct	0.070	3.390	0.237	17.80	4.22	0.10	1.25	2.97	4.37
Nov	0.040	3.390	0.136	17.80	2.41	0.06	0.75	1.66	3.08
Dec	0.030	3.390	0.102	17.80	0.00	0.05	0.00	0.00	1.64
totals			3.390		56.71	1.32	15.33	41.38	41.38

Notes:

(1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.

(2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0. See Figure 2 - NOAA TR33 Class A Pan Evaporation.

(3) = Column (1) * Column (2).

(4) = Total Free Water Surface Area (see Figure 7 - Challenger Pond Areas).

(5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.

(6) = From AII.1 Precipitation Data.

(7) = (Column (6) * 70%) * Column (4)

(8) = Column (5) -Column (7).

(9) = Column (8) Lagged utilizing AWAS program (See AII.5).

Pond 2

Area of Exposed Groundwater: 2.30 acres

Month	(1) Monthly Distribution	(2) Free Water Surface Evaporation [ft./yr.]	(3) Gross Evaporation Rate [ft./mo.]	(4) Surface Area [acres]	(5) Gross Evaporation Volumetric Flow [acre-ft./mo.]	(6) Average Monthly Precip. [ft.]	(7) Effective Precip. Credit [acre-ft.]	(8) Net Evaporative Loss (unlagged) [acre-ft.]	(9) Net Evaporative Loss (lagged) [acre-ft.]
Jan	0.030	3.390	0.102	2.30	0.00	0.04	0.00	0.00	0.10
Feb	0.035	3.390	0.119	2.30	0.27	0.05	0.08	0.19	0.13
Mar	0.055	3.390	0.186	2.30	0.43	0.12	0.19	0.24	0.19
Apr	0.090	3.390	0.305	2.30	0.70	0.17	0.27	0.43	0.30
May	0.120	3.390	0.407	2.30	0.94	0.22	0.35	0.59	0.44
June	0.145	3.390	0.492	2.30	1.13	0.14	0.23	0.90	0.65
Jul	0.150	3.390	0.509	2.30	1.17	0.13	0.21	0.96	0.81
Aug	0.135	3.390	0.458	2.30	1.05	0.11	0.18	0.87	0.85
Sep	0.100	3.390	0.339	2.30	0.78	0.13	0.21	0.57	0.73
Oct	0.070	3.390	0.237	2.30	0.55	0.10	0.16	0.39	0.56
Nov	0.040	3.390	0.136	2.30	0.31	0.06	0.10	0.21	0.39
Dec	0.030	3.390	0.102	2.30	0.00	0.05	0.00	0.00	0.21
totals			3.390		7.33	1.32	1.98	5.35	5.35

Notes:

(1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.

(2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0. See Figure 2 - NOAA TR33 Class A Pan Evaporation.

(3) = Column (1) * Column (2).

(4) = Total Free Water Surface Area (see Figure 7 - Challenger Pond Areas).

(5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.

(6) = From AII.1 Precipitation Data.

(7) = (Column (6) * 70%) * Column (4)

(8) = Column (5) -Column (7).

(9) = Column (8) Lagged utilizing AWAS program (See AII.5).

Pond 3

Area of Exposed Groundwater: 2.60 acres

Month	(1) Monthly Distribution	(2) Free Water Surface Evaporation [ft./yr.]	(3) Gross Evaporation Rate [ft./mo.]	(4) Surface Area [acres]	(5) Gross Evaporation Volumetric Flow [acre-ft./mo.]	(6) Average Monthly Precip. [ft.]	(7) Effective Precip. Credit [acre-ft.]	(8) Net Evaporative Loss (unlagged) [acre-ft.]	(9) Net Evaporative Loss (lagged) [acre-ft.]	(10) Net Evaporative Loss (lagged) Pond 1 + 2 + 3 [acre-ft]
Jan	0.030	3.390	0.102	2.60	0.00	0.04	0.00	0.00	0.08	**0.94**
Feb	0.035	3.390	0.119	2.60	0.31	0.05	0.09	0.22	0.16	**1.30**
Mar	0.055	3.390	0.186	2.60	0.48	0.12	0.22	0.26	0.22	**1.84**
Apr	0.090	3.390	0.305	2.60	0.79	0.17	0.31	0.48	0.37	**2.92**
May	0.120	3.390	0.407	2.60	1.06	0.22	0.40	0.66	0.54	**4.30**
June	0.145	3.390	0.492	2.60	1.28	0.14	0.25	1.03	0.82	**6.46**
Jul	0.150	3.390	0.509	2.60	1.32	0.13	0.24	1.08	0.97	**8.03**
Aug	0.135	3.390	0.458	2.60	1.19	0.11	0.20	0.99	0.97	**8.41**
Sep	0.100	3.390	0.339	2.60	0.88	0.13	0.24	0.64	0.78	**7.18**
Oct	0.070	3.390	0.237	2.60	0.62	0.10	0.18	0.44	0.58	**5.51**
Nov	0.040	3.390	0.136	2.60	0.35	0.06	0.11	0.24	0.39	**3.86**
Dec	0.030	3.390	0.102	2.60	0.00	0.05	0.00	0.00	0.17	**2.01**
totals			3.390		8.28	1.32	2.24	6.04		**52.77**

Notes:

(1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.

(2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0. See Figure 2 - NOAA TR33 Class A Pan Evaporation.

(3) = Column (1) * Column (2).

(4) = Total Free Water Surface Area (see Figure 7 - Challenger Pond Areas).

(5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.

(6) = From AII.1 Precipitation Data.

(7) = (Column (6) * 70%) * Column (4)

(8) = Column (5) -Column (7).

(9) = Column (8) Lagged utilizing AWAS program (See AII.5).

(10) = Pond 1, Column (9) + Pond 2, Column (9) + Pond 3, Column (9).

Month	(1) Gardels Total Net Evaporative Loss [acre-ft.]	(2) Brownwood Total Net Evaporative Loss [acre-ft.]	(3) Kirtright Total Net Evaporative Loss [acre-ft.]	(4) Challenger Total Net Evaporative Loss [acre-ft.]	(5) Total Net Evaporative Loss [acre-ft.]
Jan	0.38	0.77	0.00	0.94	**2.09**
Feb	0.58	1.05	1.77	1.30	**4.70**
Mar	0.73	1.31	2.14	1.84	**6.02**
Apr	1.13	1.81	3.89	2.92	**9.75**
May	1.61	2.41	5.29	4.30	**13.61**
June	2.44	3.43	8.31	6.46	**20.64**
Jul	2.96	4.10	8.83	8.03	**23.92**
Aug	3.04	4.16	8.05	8.41	**23.66**
Sep	2.53	3.47	5.22	7.18	**18.40**
Oct	1.95	2.67	3.50	5.51	**13.63**
Nov	1.38	1.97	1.96	3.86	**9.17**
Dec	0.72	1.17	0.00	2.01	**3.90**
totals	19.45	28.32	48.96	52.77	**149.50**

Notes:

(1) = Column (9) of AI.1 - Evaporative Loss Worksheet - Gardels Pit
(2) = Column (9) of AI.2 - Evaporative Loss Worksheet -Brownwood Pit
(3) = Column (9) of AI.3 - Evaporative Loss Worksheet - Kirtright Pit
(4) = Column (9) of AI.4 - Evaporative Loss Worksheet - Challenger Pit
(5) = Column (1) + Column (2)+ Column (3)+ Column (4)

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

October 4, 2012

WEILAND, INC.
PETER WAYLAND
P.O. BOX 18087
BOULDER, CO 80308

RE: COMPACTED CLAY LINER APPROVAL
GARDELS WEST RESERVOIR (WDID 0403396)
GARDELS PIT, DRMS M-2005-033 (WDID 0403019)
S19-T5N-R68W, WATER DIVISION 1, WATER DISTRICT 4

Dear Peter:

The purpose of this letter is to approve the lining of the west mining cell of the Gardels Pit. This reservoir is located in the SESENW of Section 19, Township 5 North, Range 68 West of the 6th P.M. and is a part of the Gardels Pit (DRMS M-2005-033). This compacted clay liner leak test commenced June 15, 2012 and concluded on September 14, 2012. A site inspection was done by our office on October 2, 2012.

Your report dated October 1, 2012 provides the liner summary and leak test result. The test data provided indicates that **the reservoir has been lined to the design standard** referenced in the August 1999 State Engineer Guidelines for Lining Criteria for Gravel Pits (1999 SEO Guidelines). **Meeting the design standard requires that during reservoir operations all water inflows and outflows for the liner perimeter enclosed area be accounted for on a monthly basis.**

With this liner approval, the Gardels West Reservoir is now classified as a lined reservoir in accordance with the 1999 SEO Guidelines. Water shall not be impounded in the reservoir except pursuant to lawful diversions allowed by statute or decree. At all other times, all inflow of water into the reservoir from any source, including precipitation and ground water inflows shall be removed to prevent illegal storage of water. Prior to ANY use of this site, the owner or operator will need to coordinate with Jason Smith, District 4 Water Commissioner, to review operations, measurement structures, stage-storage curves, and accounting.

Please contact me at the number below if you have any questions.

Sincerely,

Jonathan M. Hernandez, P.E.
Water Resource Engineer

ec: Jason Smith, District 4 Water Commissioner (Jason.Smith2@state.co.us)
WDID File (0403396, 0403019)

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

John W. Hickenlooper
Governor

Mike King
Executive Director

Dick Wolfe, P.E.
Director/State Engineer

David L. Nettles, P.E.
Division Engineer

October 4, 2012

WEILAND, INC.
PETER WAYLAND
P.O. BOX 18087
BOULDER, CO 80308

RE: COMPACTED CLAY LINER APPROVAL
BROWNWOOD SOUTH EAST RESERVOIR (WDID 0403398)
BROWNWOOD PIT, DRMS M-1979-059 (WDID 0403014)
S20-T5N-R68W, WATER DIVISION 1, WATER DISTRICT 4

Dear Peter:

The purpose of this letter is to approve the lining of the south east mining cell of the Brownwood Pit. This reservoir is located in the SWSW of Section 20, Township 5 North, Range 68 West of the 6th P.M. and is a part of the Brownwood Pit (DRMS M-1979-059). This compacted clay liner leak test commenced May 10, 2012 and concluded on August 9, 2012. A site inspection was done by our office on October 2, 2012.

Your report dated October 2, 2012 provides the liner summary and leak test result. The test data provided indicates that **the reservoir has been lined to the design standard** referenced in the August 1999 State Engineer Guidelines for Lining Criteria for Gravel Pits (1999 SEO Guidelines). **Meeting the design standard requires that during reservoir operations all water inflows and outflows for the liner perimeter enclosed area be accounted for on a monthly basis.**

With this liner approval, the Brownwood South East Reservoir is now classified as a lined reservoir in accordance with the 1999 SEO Guidelines. Water shall not be impounded in the reservoir except pursuant to lawful diversions allowed by statute or decree. At all other times, all inflow of water into the reservoir from any source, including precipitation and ground water inflows shall be removed to prevent illegal storage of water. Prior to ANY use of this site, the owner or operator will need to coordinate with Jason Smith, District 4 Water Commissioner, to review operations, measurement structures, stage-storage curves, and accounting.

Please contact me at the number below if you have any questions.

Sincerely,

Jonathan M. Hernandez, P.E.
Water Resource Engineer

ec: Jason Smith, District 4 Water Commissioner (Jason.Smith2@state.co.us)
WDID File (0403398, 0403014)

APPENDIX II

Description: **LOVELAND NCWCD**

Time Series Identifier:	**USC00055236.NOAA.Precip.Month**	**Data Source:**	**NOAA**
Located in Water Division, District:	**1, 4**	**Measurement Type:**	**Precip**
Located in County, State:	**LARIMER, CO**	**Data Interval:**	**Monthly**
Located in HUC:	**10190006**	**Data Units:**	**IN**
Latitude, Longitude	**40.435000 , -105.085000**		
Elevation:	**5,079.99**		

Time Series Creation History:

Available Data: **1989 To 2017**
Selected Time Series From: **1989-01 To 2017-12**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
1989	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	2.21	NC
1990	1.00	0.14	0.54	0.67	0.67	4.56	0.97	2.89	0.29	1.67	1.43	2.37	17.19
1991	0.49	0.73	0.58	0.45	0.03	0.25	0.83	2.04	2.06	3.05	1.47	1.12	13.10
1992	0.65	1.71	0.03	0.48	0.02	3.05	1.17	1.19	1.88	1.48	2.86	0.00	14.52
1993	0.17	1.11	0.30	0.38	0.84	1.43	2.14	1.12	2.55	1.04	0.95	2.70	14.71
1994	2.01	1.23	0.18	0.41	0.80	0.56	2.53	1.28	2.91	1.07	1.77	0.72	15.47
1995	0.81	0.69	0.44	0.21	0.94	0.69	3.16	6.80	3.44	0.82	0.18	1.84	20.02
1996	0.16	0.63	0.11	1.10	0.28	1.51	0.85	2.76	1.56	2.44	0.70	2.74	14.86
1997	0.48	0.72	0.09	0.91	0.77	0.67	3.26	2.57	2.61	1.98	3.11	2.24	19.41
1998	1.25	0.46	0.28	0.12	0.28	2.05	1.99	2.05	1.32	1.09	0.54	0.90	12.34
1999	3.43	0.89	NC	0.45	0.06	0.67	NC	1.83	2.26	1.70	1.85	1.57	NC
2000	1.05	0.72	0.16	0.09	0.28	1.11	0.71	1.50	1.22	0.89	0.60	1.85	10.17
2001	0.57	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2002	NC	NC	NC	NC	NC	NC	NC	NC	NC	0.29	0.47	1.95	NC
2003	0.94	0.61	0.01	0.01	0.97	3.92	2.54	2.63	2.99	0.76	1.58	0.31	17.26
2004	0.09	0.55	0.37	0.47	0.88	0.47	1.96	2.04	2.48	2.66	2.06	2.04	16.06
2005	1.34	1.78	0.21	1.07	0.51	0.78	3.20	2.26	2.61	0.53	0.92	0.37	15.58
2006	3.19	0.11	0.29	0.11	0.59	1.61	0.14	0.71	0.10	1.59	1.72	0.37	10.54
2007	2.22	0.62	1.01	1.03	0.39	1.67	1.96	1.55	0.25	1.15	1.87	1.58	15.28
2008	1.43	0.39	1.57	0.04	0.36	1.14	0.80	1.89	1.32	0.52	2.58	1.43	13.47
2009	0.63	0.07	0.68	0.58	0.26	1.31	4.92	2.02	2.32	2.14	1.34	1.16	17.42
2010	2.28	0.71	1.34	0.23	0.76	2.11	3.30	1.97	2.44	2.50	0.73	0.06	18.42
2011	0.54	0.76	0.33	0.46	0.84	0.29	2.30	4.63	1.67	2.31	0.16	1.64	15.91
2012	1.45	0.88	1.41	0.18	1.45	0.01	0.50	1.62	0.11	2.12	0.08	1.19	11.01
2013	0.81	0.49	0.33	0.08	1.04	1.26	3.22	3.24	1.44	1.32	1.11	6.63	20.96
2014	1.24	0.46	0.50	1.81	0.40	1.22	0.58	5.32	0.65	2.91	2.68	1.46	19.23
2015	0.92	1.04	0.81	0.30	1.57	0.37	2.74	6.44	2.66	1.19	1.02	0.05	19.10
2016	2.24	1.80	1.36	0.52	1.26	2.85	2.30	2.23	0.23	1.08	0.80	0.25	16.92
2017	0.46	0.24	0.72	0.91	0.46	0.67	2.42	4.11	0.39	0.44	1.91	1.86	14.59
2018	1.50	0.57	0.38	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC

Notes:

Years shown are water years.
A water year spans October of the previous calendar year to September of the current year (all within the indicated water year).
Annual values and statistics are computed only on non-missing data.
NC indicates that a value is not computed because of missing data or the data value itself is missing.

Description: **LOVELAND NCWCD**

Time Series Identifier:	**USC00055236.NOAA.Precip.Month**	**Data Source:**	**NOAA**
Located in Water Division, District:	**1, 4**	**Measurement Type:**	**Precip**
Located in County, State:	**LARIMER, CO**	**Data Interval:**	**Monthly**
Located in HUC:	**10190006**	**Data Units:**	**IN**
Latitude, Longitude	**40.435000 , -105.085000**		
Elevation:	**5,079.99**		

Time Series Creation History:

Available Data: **1989 To 2017**
Selected Time Series From: **1989-01 To 2017-12**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Min:	0.09	0.07	0.01	0.01	0.02	0.01	0.14	0.71	0.10	0.29	0.08	0.00	10.17
Max:	3.43	1.80	1.57	1.81	1.57	4.56	4.92	6.80	3.44	3.05	3.11	6.63	20.96
Mean:	1.19	0.74	0.54	0.50	0.64	1.39	2.02	2.64	1.68	1.51	1.35	1.52	15.74

Notes:

Years shown are water years.
A water year spans October of the previous calendar year to September of the current year (all within the indicated water year).
Annual values and statistics are computed only on non-missing data.
NC indicates that a value is not computed because of missing data or the data value itself is missing.

Description: **LOVELAND NCWCD**

Time Series Identifier:	**USC00055236.NOAA.TempMean.Month**	**Data Source:**	**NOAA**
Located in Water Division, District:	**1, 4**	**Measurement Type:**	**MeanTemp**
Located in County, State:	**LARIMER, CO**	**Data Interval:**	**Monthly**
Located in HUC:	**10190006**	**Data Units:**	**F**
Latitude, Longitude	**40.435000 , -105.085000**		
Elevation:	**5,079.99**		

Time Series Creation History:

Available Data: **1989 To 2017**
Selected Time Series From: **1989-01 To 2017-12**

Water Year	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
1989	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	60.06	NC
1990	50.00	39.82	25.10	33.73	31.04	36.69	47.62	54.29	68.63	69.00	68.94	64.69	49.13
1991	49.82	41.16	22.05	23.76	38.08	41.54	46.61	57.87	66.30	70.41	69.35	60.78	48.98
1992	49.34	34.18	31.96	30.95	38.60	41.36	52.74	58.40	64.46	68.29	66.39	63.00	49.97
1993	51.89	32.05	24.13	24.15	27.60	41.61	46.54	57.76	63.58	69.29	66.97	57.42	46.92
1994	47.32	32.72	32.03	31.85	28.69	42.70	47.28	60.43	69.95	70.55	70.62	63.76	49.83
1995	49.63	35.89	33.30	31.23	35.26	40.52	44.25	50.59	62.75	70.39	73.61	60.59	49.00
1996	49.43	41.18	32.89	25.87	33.15	36.67	48.63	58.02	67.43	71.44	69.38	60.04	49.51
1997	50.76	36.38	33.23	25.49	31.47	41.90	41.99	57.33	66.89	71.65	69.14	63.73	49.16
1998	50.08	35.25	30.95	33.46	35.09	37.60	46.50	59.15	62.23	72.78	71.53	66.85	50.12
1999	49.89	42.77	NC	33.76	39.63	43.78	NC	55.24	64.63	73.18	70.74	58.59	NC
2000	50.46	44.64	35.80	33.08	39.31	41.41	51.30	60.82	66.61	75.05	73.19	63.19	52.91
2001	50.01	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
2004	NC	NC	NC	NC	29.99	45.01	47.45	59.35	62.02	69.19	66.71	60.88	NC
2005	49.87	36.83	30.55	30.94	34.74	39.23	46.44	55.33	65.30	73.77	69.33	62.41	49.56
2006	50.54	40.78	27.89	35.46	29.32	37.01	50.85	59.26	70.71	74.04	71.14	57.20	50.35
2007	48.42	38.25	26.85	19.51	28.49	44.17	45.74	57.29	66.45	75.10	72.97	62.96	48.85
2008	51.46	39.18	22.68	25.07	32.25	38.16	44.20	54.81	64.60	72.23	67.97	58.94	47.63
2009	48.48	41.09	24.08	30.87	35.58	39.54	44.56	57.21	62.62	68.55	66.75	60.67	48.33
2010	41.11	38.77	21.51	26.54	26.37	38.59	46.67	52.20	66.34	71.61	70.72	62.69	46.93
2011	52.16	36.51	32.57	26.42	25.78	41.21	46.45	51.18	65.65	73.70	73.45	61.45	48.88
2012	50.22	37.26	24.30	33.02	27.75	46.14	52.28	57.58	71.28	75.21	70.83	63.30	50.76
2013	47.07	38.46	28.96	26.88	27.89	35.64	40.52	55.90	67.99	71.66	71.13	64.12	48.02
2014	46.59	38.26	26.21	28.07	25.75	38.70	47.69	56.17	65.28	71.35	68.73	61.80	47.88
2015	52.66	33.57	30.27	30.97	33.11	41.86	48.14	51.89	68.05	71.09	70.81	65.96	49.87
2016	54.49	37.39	27.33	28.01	35.64	40.67	47.92	52.91	69.97	73.16	69.03	62.97	49.96
2017	54.89	43.60	24.38	27.30	39.40	45.72	47.89	54.60	67.55	73.34	68.29	62.32	50.77
2018	47.24	42.14	30.63	NC	NC	NC	NC	NC	NC	NC	NC	NC	NC
Min:	41.11	32.05	21.51	19.51	25.75	35.64	40.52	50.59	62.02	68.29	66.39	57.20	46.92
Max:	54.89	44.64	35.80	35.46	39.63	46.14	52.74	60.82	71.28	75.21	73.61	66.85	52.91
Mean:	49.76	38.33	28.32	29.02	32.40	40.70	47.09	56.22	66.29	71.84	69.91	61.94	49.27

Notes:

Years shown are water years.
A water year spans October of the previous calendar year to September of the current year (all within the indicated water year).
Annual values and statistics are computed only on non-missing data.
NC indicates that a value is not computed because of missing data or the data value itself is missing.

AII.2. Gardels IDS AWAS Model Output.

Pond 1

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1400	20,000.00	0.2	410.5

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep.
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
1	0	0	0
2	0.0059	0.247	0.247
3	0.008	0.693	0.447
4	0.015	1.475	0.782
5	0.022	2.649	1.174
6	0.034	4.453	1.804
7	0.039	6.688	2.235
8	0.039	9.018	2.330
9	0.030	10.992	1.974
10	0.023	12.526	1.534
11	0.016	13.628	1.102
12	0.007	14.225	0.598
13	0.004	14.548	0.323
14	0.008	14.988	0.440
15	0.010	15.550	0.562
16	0.016	16.401	0.851
17	0.022	17.617	1.215
18	0.034	19.445	1.829
19	0.039	21.696	2.250
20	0.039	24.035	2.339
21	0.030	26.014	1.979
22	0.023	27.551	1.538
23	0.016	28.655	1.104
24	0.007	29.254	0.599
25	0.004	29.577	0.323
26	0.008	30.018	0.441
27	0.010	30.580	0.563
28	0.016	31.431	0.851
29	0.022	32.647	1.216
30	0.034	34.475	1.829
31	0.039	36.726	2.250
32	0.039	39.065	2.339
33	0.030	41.044	1.979
34	0.023	42.581	1.538
35	0.016	43.685	1.104
36	0.007	44.284	0.599

Pond 2

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1400	20,000.00	0.2	254.7

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep.
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
1	0	0	0
2	0.0021	0.0998	0.0998
3	0.003	0.252	0.152
4	0.005	0.520	0.269
5	0.007	0.905	0.385
6	0.011	1.506	0.601
7	0.012	2.213	0.708
8	0.012	2.917	0.704
9	0.009	3.466	0.548
10	0.006	3.874	0.409
11	0.004	4.151	0.277
12	0.001	4.269	0.118
13	0.001	4.330	0.061
14	0.003	4.466	0.136
15	0.003	4.639	0.173
16	0.005	4.921	0.282
17	0.007	5.314	0.393
18	0.011	5.919	0.605
19	0.012	6.630	0.710
20	0.012	7.335	0.706
21	0.009	7.884	0.549
22	0.006	8.294	0.409
23	0.004	8.571	0.278
24	0.001	8.689	0.118
25	0.001	8.750	0.061
26	0.003	8.886	0.136
27	0.003	9.060	0.173
28	0.005	9.341	0.282
29	0.007	9.734	0.393
30	0.011	10.340	0.605
31	0.012	11.050	0.710
32	0.012	11.755	0.706
33	0.009	12.305	0.549
34	0.006	12.714	0.409
35	0.004	12.992	0.278
36	0.001	13.110	0.118

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	4,171	40,137.00	0.2	633

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
1	0.000	0.000	0.000
2	0.010	0.427	0.427
3	0.014	1.204	0.777
4	0.026	2.543	1.339
5	0.037	4.540	1.998
6	0.058	7.602	3.062
7	0.066	11.373	3.771
8	0.064	15.234	3.862
9	0.049	18.441	3.207
10	0.037	20.883	2.442
11	0.026	22.643	1.760
12	0.012	23.624	0.981
13	0.009	24.225	0.601
14	0.018	25.129	0.904
15	0.021	26.312	1.183
16	0.032	28.005	1.693
17	0.042	30.317	2.311
18	0.062	33.657	3.340
19	0.069	37.675	4.019
20	0.067	41.757	4.082
21	0.052	45.161	3.403
22	0.039	47.777	2.616
23	0.028	49.693	1.916
24	0.014	50.813	1.120
25	0.011	51.538	0.725
26	0.019	52.552	1.014
27	0.022	53.833	1.281
28	0.033	55.614	1.781
29	0.043	58.003	2.389
30	0.063	61.412	3.409
31	0.070	65.492	4.080
32	0.068	69.629	4.137
33	0.052	73.081	3.452
34	0.040	75.742	2.660
35	0.029	77.696	1.955
36	0.014	78.851	1.155
37	0.011	79.606	0.756
38	0.020	80.648	1.042
39	0.023	81.953	1.305
40	0.033	83.756	1.803
41	0.043	86.164	2.409

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	4,171	40,137.00	0.2	633

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
42	0.064	89.591	3.427
43	0.071	93.687	4.096
44	0.069	97.837	4.151
45	0.053	101.302	3.464
46	0.040	103.973	2.671
47	0.029	105.937	1.964
48	0.015	107.100	1.163
49	0.011	107.864	0.763
50	0.020	108.912	1.049
51	0.023	110.224	1.312
52	0.033	112.032	1.808
53	0.043	114.445	2.413
54	0.064	117.876	3.431
55	0.071	121.975	4.099
56	0.069	126.129	4.154
57	0.053	129.597	3.468
58	0.040	132.271	2.674
59	0.029	134.237	1.967
60	0.015	135.403	1.165
61	0.011	136.168	0.765
62	0.020	137.218	1.050
63	0.023	138.531	1.313
64	0.033	140.341	1.809
65	0.043	142.755	2.415
66	0.064	146.187	3.432
67	0.071	150.287	4.100
68	0.069	154.443	4.155
69	0.053	157.911	3.468
70	0.040	160.585	2.674
71	0.029	162.552	1.967
72	0.015	163.718	1.166

Pond 1

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	3,500	20,115.00	0.2	1,062

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
1	0.000	0.000	0.000
2	0.001	0.029	0.029
3	0.002	0.132	0.103
4	0.004	0.313	0.181
5	0.006	0.609	0.297
6	0.009	1.060	0.451
7	0.012	1.695	0.635
8	0.013	2.439	0.744
9	0.012	3.188	0.749
10	0.010	3.846	0.658
11	0.008	4.395	0.549
12	0.006	4.821	0.426
13	0.005	5.131	0.310
14	0.005	5.410	0.279
15	0.006	5.726	0.316
16	0.007	6.095	0.369
17	0.009	6.561	0.467
18	0.012	7.167	0.606
19	0.014	7.944	0.777
20	0.015	8.818	0.874
21	0.014	9.687	0.868
22	0.012	10.454	0.768
23	0.010	11.105	0.651
24	0.007	11.624	0.519
25	0.006	12.020	0.396
26	0.006	12.378	0.358
27	0.007	12.767	0.389
28	0.008	13.203	0.436
29	0.010	13.731	0.528
30	0.013	14.394	0.663
31	0.015	15.223	0.829
32	0.016	16.146	0.923
33	0.014	17.059	0.913
34	0.012	17.867	0.809
35	0.010	18.556	0.688
36	0.008	19.110	0.554
37	0.006	19.538	0.428
38	0.007	19.925	0.387
39	0.007	20.341	0.416
40	0.008	20.802	0.461
41	0.010	21.353	0.551

Pond 1

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	3,500	20,115.00	0.2	1,062

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
42	0.013	22.037	0.684
43	0.015	22.886	0.849
44	0.016	23.827	0.941
45	0.015	24.756	0.929
46	0.013	25.580	0.824
47	0.011	26.282	0.702
48	0.008	26.849	0.567
49	0.007	27.289	0.440
50	0.007	27.687	0.398
51	0.007	28.113	0.426
52	0.009	28.584	0.471
53	0.010	29.144	0.560
54	0.013	29.835	0.692
55	0.015	30.691	0.856
56	0.016	31.639	0.947
57	0.015	32.574	0.936
58	0.013	33.404	0.830
59	0.011	34.111	0.708
60	0.008	34.683	0.572

Pond 1

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1,700	40,000.00	0.20	653

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
1	0.00	0.00	0.00
2	0.02	0.62	0.62
3	0.024	1.861	1.240
4	0.043	4.022	2.161
5	0.061	7.300	3.278
6	0.095	12.273	4.973
7	0.110	18.518	6.245
8	0.110	25.099	6.581
9	0.086	30.772	5.673
10	0.064	35.139	4.367
11	0.043	38.216	3.077
12	0.018	39.851	1.635
13	0.009	40.617	0.765
14	0.020	41.620	1.003
15	0.026	43.050	1.430
16	0.044	45.307	2.257
17	0.062	48.633	3.326
18	0.095	53.629	4.997
19	0.110	59.887	6.257
20	0.110	66.473	6.587
21	0.086	72.149	5.676
22	0.064	76.518	4.369
23	0.043	79.595	3.078
24	0.018	81.231	1.636
25	0.009	81.997	0.766
26	0.020	83.000	1.003
27	0.026	84.430	1.431
28	0.044	86.687	2.257
29	0.062	90.013	3.326
30	0.095	95.010	4.997
31	0.110	101.267	6.257
32	0.110	107.853	6.587
33	0.086	113.529	5.676
34	0.064	117.898	4.369
35	0.043	120.976	3.078
36	0.018	122.611	1.636
37.00	0.009	123.377	0.766
38.00	0.020	124.380	1.003
39.00	0.026	125.810	1.431
40.00	0.044	128.067	2.257
41.00	0.062	131.393	3.326
42.00	0.095	136.390	4.997
43.00	0.110	142.647	6.257
44.00	0.110	149.233	6.587

Pond 1

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1,700	40,000.00	0.20	653

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
45.00	0.086	154.909	5.676
46.00	0.064	159.278	4.369
47.00	0.043	162.356	3.078
48.00	0.018	163.991	1.636
49.00	0.009	164.757	0.766
50.00	0.020	165.760	1.003
51.00	0.026	167.190	1.431
52.00	0.044	169.447	2.257
53.00	0.062	172.773	3.326
54.00	0.095	177.770	4.997
55.00	0.110	184.027	6.257
56.00	0.110	190.613	6.587
57.00	0.086	196.289	5.676
58.00	0.064	200.658	4.369
59.00	0.043	203.736	3.078
60.00	0.018	205.371	1.636

Pond 2

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1,700	40,000.00	0.20	641

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
1	0.00	0.00	0.00
2	0.00	0.08	0.08
3	0.003	0.243	0.163
4	0.006	0.527	0.284
5	0.008	0.957	0.431
6	0.012	1.604	0.647
7	0.014	2.413	0.809
8	0.014	3.261	0.848
9	0.011	3.991	0.729
10	0.008	4.554	0.564
11	0.006	4.949	0.395
12	0.002	5.156	0.208
13	0.001	5.253	0.097
14	0.003	5.382	0.129
15	0.003	5.569	0.187
16	0.006	5.865	0.296
17	0.008	6.301	0.437
18	0.012	6.951	0.650
19	0.014	7.762	0.810
20	0.014	8.611	0.849
21	0.011	9.340	0.730
22	0.008	9.904	0.564
23	0.006	10.299	0.395
24	0.002	10.506	0.208
25	0.001	10.603	0.097
26	0.003	10.732	0.129
27	0.003	10.919	0.187
28	0.006	11.214	0.296
29	0.008	11.651	0.437
30	0.012	12.301	0.650
31	0.014	13.112	0.810
32	0.014	13.961	0.849
33	0.011	14.690	0.730
34	0.008	15.254	0.564
35	0.006	15.649	0.395
36	0.002	15.856	0.208
37	0.001	15.953	0.097
38	0.003	16.082	0.129
39	0.003	16.269	0.187
40	0.006	16.564	0.296
41	0.008	17.001	0.437
42	0.012	17.651	0.650
43	0.014	18.461	0.810
44	0.014	19.310	0.849

Pond 2

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1,700	40,000.00	0.20	641

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
45	0.011	20.040	0.730
46	0.008	20.604	0.564
47	0.006	20.999	0.395
48	0.002	21.206	0.208
49	0.001	21.303	0.097
50	0.003	21.432	0.129
51	0.003	21.619	0.187
52	0.006	21.914	0.296
53	0.008	22.351	0.437
54	0.012	23.001	0.650
55	0.014	23.811	0.810
56	0.014	24.660	0.849
57	0.011	25.390	0.730
58	0.008	25.954	0.564
59	0.006	26.348	0.395
60	0.002	26.556	0.208

Pond 3

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1,700	40,000.00	0.20	424

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
1	0.00	0.00	0.00
2	0.00	0.13	0.13
3	0.004	0.331	0.204
4	0.007	0.691	0.360
5	0.010	1.222	0.532
6	0.015	2.037	0.815
7	0.017	3.002	0.965
8	0.016	3.975	0.973
9	0.012	4.753	0.777
10	0.009	5.333	0.581
11	0.006	5.721	0.388
12	0.002	5.890	0.169
13	0.001	5.965	0.075
14	0.003	6.129	0.164
15	0.004	6.352	0.223
16	0.007	6.721	0.369
17	0.010	7.257	0.536
18	0.015	8.075	0.817
19	0.017	9.041	0.966
20	0.016	10.015	0.974
21	0.012	10.792	0.778
22	0.009	11.373	0.581
23	0.006	11.761	0.388
24	0.002	11.930	0.169
25	0.001	12.005	0.075
26	0.003	12.169	0.164
27	0.004	12.392	0.223
28	0.007	12.761	0.369
29	0.010	13.297	0.536
30	0.015	14.115	0.817
31	0.017	15.081	0.966
32	0.016	16.054	0.974
33	0.012	16.832	0.778
34	0.009	17.413	0.581
35	0.006	17.801	0.388
36	0.002	17.970	0.169
37	0.001	18.045	0.075
38	0.003	18.209	0.164
39	0.004	18.432	0.223
40	0.007	18.801	0.369
41	0.010	19.337	0.536
42	0.015	20.154	0.817
43	0.017	21.121	0.966
44	0.016	22.094	0.974

Pond 3

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1,700	40,000.00	0.20	424

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
45	0.012	22.872	0.778
46	0.009	23.453	0.581
47	0.006	23.841	0.388
48	0.002	24.009	0.169

APPENDIX III

AIII.1. Total Hill Brush Diversions at River Headgate 1950-1986 (S:1, U:1)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
1950	0.00	0.00	0.00	0.00	143.01	755.71	882.26	0.00	0.00	0.00	0.00	0.00	1780.98
1951	0.00	0.00	0.00	0.00	210.45	460.77	567.88	203.90	17.85	0.00	0.00	0.00	1460.85
1952	0.00	0.00	0.00	0.00	27.77	519.68	509.76	311.41	17.85	0.00	0.00	0.00	1386.47
1953	0.00	0.00	0.00	0.00	99.18	701.17	721.99	387.77	0.00	23.80	0.00	0.00	1933.91
1954	0.00	0.00	0.00	0.00	377.26	777.53	335.21	0.00	0.00	0.00	0.00	0.00	1490.01
1955	0.00	0.00	0.00	0.00	223.74	752.54	745.60	614.49	0.00	0.00	0.00	0.00	2336.37
1956	0.00	0.00	0.00	0.00	513.93	782.49	565.69	568.87	272.14	0.00	0.00	0.00	2703.11
1957	0.00	0.00	0.00	0.00	0.00	535.74	808.87	452.24	89.26	0.00	0.00	0.00	1886.11
1958	0.00	0.00	0.00	0.00	0.00	672.61	709.10	511.74	71.41	0.00	0.00	0.00	1964.86
1959	0.00	0.00	0.00	0.00	39.67	491.31	676.57	404.63	19.84	0.00	0.00	0.00	1632.02
1960	0.00	0.00	0.00	0.00	267.97	779.12	1055.02	140.83	0.00	0.00	0.00	0.00	2242.94
1961	0.00	0.00	0.00	0.00	112.19	546.65	786.46	413.98	242.05	0.00	0.00	0.00	2101.32
1962	0.00	0.00	0.00	0.00	776.94	806.89	1408.09	541.50	474.85	104.33	0.00	0.00	4112.59
1963	0.00	0.00	0.00	0.00	765.04	746.39	731.52	777.53	183.47	0.00	0.00	0.00	3203.95
1964	0.00	0.00	0.00	0.00	597.03	1060.18	1269.44	355.05	0.00	293.56	0.00	0.00	3575.26
1965	0.00	0.00	0.00	0.00	412.57	825.14	773.57	720.01	55.54	0.00	0.00	0.00	2786.82
1966	0.00	0.00	0.00	0.00	240.00	829.10	581.17	105.13	0.00	0.00	0.00	0.00	1755.40
1967	0.00	0.00	0.00	0.00	202.32	386.78	527.61	466.12	41.65	0.00	0.00	0.00	1624.49
1968	0.00	0.00	0.00	0.00	115.04	803.32	882.66	364.96	0.00	0.00	0.00	0.00	2165.98
1969	0.00	0.00	0.00	0.00	120.99	664.47	874.72	119.01	75.37	0.00	0.00	0.00	1854.57
1970	0.00	0.00	0.00	0.00	190.42	478.02	672.41	608.93	69.42	0.00	0.00	0.00	2019.20
1971	0.00	0.00	0.00	0.00	91.24	860.84	569.26	422.49	55.54	0.00	0.00	0.00	1999.37
1972	0.00	0.00	0.00	0.00	366.95	507.78	678.36	71.41	0.00	0.00	0.00	0.00	1624.49
1973	0.00	0.00	0.00	0.00	33.72	741.83	712.08	464.14	0.00	0.00	0.00	0.00	1951.77
1974	0.00	0.00	0.00	0.00	456.21	456.21	868.77	309.43	0.00	0.00	0.00	0.00	2090.61
1975	0.00	0.00	0.00	0.00	275.71	470.09	1198.03	809.27	0.00	0.00	0.00	0.00	2753.09
1976	0.00	0.00	0.00	0.00	236.04	559.35	902.49	678.36	359.01	0.00	0.00	0.00	2735.25
1977	0.00	0.00	0.00	0.00	89.26	805.30	27.77	0.00	0.00	0.00	0.00	0.00	922.33
1978	0.00	0.00	0.00	0.00	0.00	575.22	1344.81	686.29	0.00	0.00	0.00	0.00	2606.32
1979	0.00	0.00	0.00	0.00	0.00	81.32	573.23	495.88	160.66	0.00	0.00	0.00	1311.09
1980	0.00	0.00	0.00	0.00	0.00	257.86	372.90	230.09	0.00	0.00	0.00	0.00	860.84
1981	0.00	0.00	0.00	0.00	0.00	251.91	648.61	0.00	0.00	0.00	0.00	0.00	900.51
1982	0.00	0.00	0.00	0.00	0.00	0.00	476.04	636.70	0.00	0.00	0.00	0.00	1112.74
1983	0.00	0.00	0.00	0.00	0.00	35.70	511.74	255.87	138.85	0.00	0.00	0.00	942.16
1984	0.00	0.00	0.00	0.00	0.00	481.99	773.57	382.82	325.29	0.00	0.00	0.00	1963.66
1985	0.00	0.00	0.00	0.00	0.00	541.50	684.31	124.96	0.00	0.00	0.00	0.00	1350.76
1986	0.00	0.00	0.00	0.00	212.23	416.54	640.67	277.69	49.59	0.00	0.00	0.00	1596.72
Averages	0.00	0.00	0.00	0.00	194.51	578.89	731.57	376.04	73.50	11.40	0.00	0.00	1965.92

AIII.2. Historic Pro-Rata Diversions Minus 5% Ditch Loss - 26 shares Hill Brush 1950-1986

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Totals
1950	0.00	0.00	0.00	0.00	27.60	145.83	170.25	0.00	0.00	0.00	0.00	0.00	343.67
1951	0.00	0.00	0.00	0.00	40.61	88.91	109.58	39.35	3.44	0.00	0.00	0.00	281.90
1952	0.00	0.00	0.00	0.00	5.36	100.28	98.37	60.09	3.44	0.00	0.00	0.00	267.54
1953	0.00	0.00	0.00	0.00	19.14	135.30	139.32	74.83	0.00	4.59	0.00	0.00	373.18
1954	0.00	0.00	0.00	0.00	72.80	150.04	64.69	0.00	0.00	0.00	0.00	0.00	287.52
1955	0.00	0.00	0.00	0.00	43.17	145.22	143.88	118.58	0.00	0.00	0.00	0.00	450.85
1956	0.00	0.00	0.00	0.00	99.17	151.00	109.16	109.77	52.51	0.00	0.00	0.00	521.62
1957	0.00	0.00	0.00	0.00	0.00	103.38	156.09	87.27	17.22	0.00	0.00	0.00	363.96
1958	0.00	0.00	0.00	0.00	0.00	129.79	136.83	98.75	13.78	0.00	0.00	0.00	379.16
1959	0.00	0.00	0.00	0.00	7.66	94.81	130.56	78.08	3.83	0.00	0.00	0.00	314.93
1960	0.00	0.00	0.00	0.00	51.71	150.35	203.59	27.18	0.00	0.00	0.00	0.00	432.82
1961	0.00	0.00	0.00	0.00	21.65	105.49	151.76	79.88	46.71	0.00	0.00	0.00	405.49
1962	0.00	0.00	0.00	0.00	149.93	155.70	271.72	104.49	91.63	20.13	0.00	0.00	793.60
1963	0.00	0.00	0.00	0.00	147.63	144.03	141.16	150.04	35.40	0.00	0.00	0.00	618.26
1964	0.00	0.00	0.00	0.00	115.21	204.58	244.96	68.51	0.00	56.65	0.00	0.00	689.91
1965	0.00	0.00	0.00	0.00	79.61	159.23	149.27	138.94	10.72	0.00	0.00	0.00	537.77
1966	0.00	0.00	0.00	0.00	46.31	159.99	112.15	20.29	0.00	0.00	0.00	0.00	338.74
1967	0.00	0.00	0.00	0.00	39.04	74.64	101.81	89.95	8.04	0.00	0.00	0.00	313.48
1968	0.00	0.00	0.00	0.00	22.20	155.02	170.33	70.43	0.00	0.00	0.00	0.00	417.97
1969	0.00	0.00	0.00	0.00	23.35	128.22	168.79	22.97	14.54	0.00	0.00	0.00	357.87
1970	0.00	0.00	0.00	0.00	36.74	92.24	129.75	117.51	13.40	0.00	0.00	0.00	389.64
1971	0.00	0.00	0.00	0.00	17.61	166.12	109.85	81.53	10.72	0.00	0.00	0.00	385.82
1972	0.00	0.00	0.00	0.00	70.81	97.98	130.90	13.78	0.00	0.00	0.00	0.00	313.48
1973	0.00	0.00	0.00	0.00	6.51	143.15	137.41	89.56	0.00	0.00	0.00	0.00	376.63
1974	0.00	0.00	0.00	0.00	88.03	88.03	167.65	59.71	0.00	0.00	0.00	0.00	403.42
1975	0.00	0.00	0.00	0.00	53.20	90.71	231.18	156.16	0.00	0.00	0.00	0.00	531.26
1976	0.00	0.00	0.00	0.00	45.55	107.94	174.15	130.90	69.28	0.00	0.00	0.00	527.82
1977	0.00	0.00	0.00	0.00	17.22	155.40	5.36	0.00	0.00	0.00	0.00	0.00	177.98
1978	0.00	0.00	0.00	0.00	0.00	111.00	259.51	132.43	0.00	0.00	0.00	0.00	502.94
1979	0.00	0.00	0.00	0.00	0.00	15.69	110.62	95.69	31.00	0.00	0.00	0.00	253.00
1980	0.00	0.00	0.00	0.00	0.00	49.76	71.96	44.40	0.00	0.00	0.00	0.00	166.12
1981	0.00	0.00	0.00	0.00	0.00	48.61	125.16	0.00	0.00	0.00	0.00	0.00	173.77
1982	0.00	0.00	0.00	0.00	0.00	0.00	91.86	122.86	0.00	0.00	0.00	0.00	214.72
1983	0.00	0.00	0.00	0.00	0.00	6.89	98.75	49.38	26.79	0.00	0.00	0.00	181.81
1984	0.00	0.00	0.00	0.00	0.00	93.01	149.27	73.87	62.77	0.00	0.00	0.00	378.93
1985	0.00	0.00	0.00	0.00	0.00	104.49	132.05	24.11	0.00	0.00	0.00	0.00	260.66
1986	0.00	0.00	0.00	0.00	40.95	80.38	123.63	53.59	9.57	0.00	0.00	0.00	308.12
Averages	0.00	0.00	0.00	0.00	37.53	111.71	141.17	72.56	14.18	2.20	0.00	0.00	379.3604

AIII.3. Historic Crop Rotation and Acreages

1950-1968 **19 years**

	Fieled #1	Field #2	Field #3	Field #4	Field #5	Field #6	Field #7	Totals
Silage Corn		44.4	6.1	8.9	10.2			69.6
								0.0
Alfalfa	9.3							9.3
								0.0
Pasture Grass						29.1	17.5	46.6
								125.5

1969-1983 **15 years**

	Fieled #1	Field #2	Field #3	Field #4	Field #5	Field #6	Field #7	Totals
Silage Corn	9.9		6.1	8.9				24.9
								0.0
Alfalfa		46.0			7.9			53.9
								0.0
Pasture Grass						25.8	17.9	43.7
								122.5

1984-1986 **3 years**

	Fieled #1	Field #2	Field #2a	Field #3	Field #4	Field #5	Field #6	Field #7	Totals
Silage Corn	10.8		10.1	6.1	8.9				35.9
									0.0
Alfalfa		15.1				7.7			22.8
									0.0
Pasture Grass							45.0	17.5	62.5
									121.2

Weighted Average for 37 years = 123.94 acres

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	River Supply	Convey-ance Loss	Farm Surf. Water Supply	Surface Water Avail. for CU	Surf. Water DP & Runoff	Effective Rainfall to CU	Potential Crop CU	NWR	HCU from Surf. Water	NWR not met by Surface Water	Surface Water Stored in Soil Moisture Reservoir	HCU from Soil Moisture		Total HCU
Jan-50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		0.00
Apr	0.00	0.00	0.00	0.00	0.00	0.26	0.57	0.31	0.00	0.31	0.00	0.00		0.00
May	29.05	1.45	27.60	16.56	11.04	11.29	15.57	4.27	4.27	0.00	12.28	0.00		4.27
Jun	153.50	7.68	145.83	87.50	58.33	7.85	40.18	32.34	32.34	0.00	31.59	0.00		32.34
Jul	179.21	8.96	170.25	102.15	68.10	8.90	57.53	48.63	48.63	0.00	31.59	0.00		48.63
Aug	0.00	0.00	0.00	0.00	0.00	3.77	53.81	50.04	0.00	50.04	0.00	31.59		31.59
Sep	0.00	0.00	0.00	0.00	0.00	5.85	21.16	15.31	0.00	15.31	0.00	0.00		0.00
Oct	0.00	0.00	0.00	0.00	0.00	0.53	7.98	7.45	0.00	7.45	0.00	0.00		0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.03	0.14	0.11	0.00	0.11	0.69	0.00		0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.14	0.00		0.00
Totals	361.76	18.09	343.67	206.20	137.47	38.47	196.94	158.46	85.24	73.22		31.59		116.83
Jan-51	0	0	0	0	0	0	0	0	0	0	2.14	0		0
Feb	0	0	0	0	0	0	0	0	0	0	2.14	0		0
Mar	0	0	0	0	0	0	0	0	0	0	2.14	0		0
Apr	0	0	0	0	0	0	0	0	0	0	2.14	0		0
May	42.75	2.14	40.61	24.37	16.24	9.73	19.97	10.24	10.24	0	16.27	0		10.24
Jun	93.59	4.68	88.91	53.35	35.57	11.59	33.61	22.02	22.02	0	31.59	0		22.02
Jul	115.35	5.77	109.58	65.75	43.83	13.12	68.7	55.58	55.58	0	31.59	0		55.58
Aug	41.42	2.07	39.35	23.61	15.74	39.04	56.43	17.39	17.39	0	31.59	0		17.39
Sep	3.63	0.18	3.44	2.07	1.38	2.54	14.8	12.27	2.07	10.2	22.19	10.2		12.27
Oct	0	0	0	0	0	3.34	4.45	1.11	0	1.11	21.94	1.11		1.11
Nov	0	0	0	0	0	0	0	0	0	0	21.94	0		0
Dec	0	0	0	0	0	0	0	0	0	0	21.94	0		0
Totals	296.73	14.84	281.9	169.14	112.76	79.35	197.95	118.6	107.3	11.31		11.31		118.61

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-52	0	0	0	0	0	0	0	0	0	0	21.94	0		0
Feb	0	0	0	0	0	0	0	0	0	0	21.94	0		0
Mar	0	0	0	0	0	0	0	0	0	0	21.94	0		0
Apr	0	0	0	0	0	1.11	2.8	1.68	0	1.68	21.71	1.68		1.68
May	5.64	0.28	5.36	3.22	2.14	14.62	22.56	7.93	3.22	4.71	20.52	4.71		7.93
Jun	105.56	5.28	100.28	60.17	40.11	14.53	50.04	35.5	35.5	0	31.59	0		35.5
Jul	103.54	5.18	98.37	59.02	39.35	4.93	67.39	62.46	59.02	3.44	28.15	3.44		62.46
Aug	63.26	3.16	60.09	36.06	24.04	6.34	59.86	53.52	36.06	17.46	10.68	17.46		53.52
Sep	3.63	0.18	3.44	2.07	1.38	0	16.29	16.29	2.07	14.22	6.03	10.68		12.75
Oct	0	0	0	0	0	0.17	5.01	4.84	0	4.84	6.02	4.84		4.84
Nov	0	0	0	0	0	0	0	0	0	0	6.35	0		0
Dec	0	0	0	0	0	0	0	0	0	0	6.35	0		0
Totals	281.63	14.08	267.54	160.53	107.02	41.71	223.94	182.24	135.86	46.35		42.81		178.68
Jan-53	0	0	0	0	0	0	0	0	0	0	6.35	0		0
Feb	0	0	0	0	0	0	0	0	0	0	6.35	0		0
Mar	0	0	0	0	0	0	0	0	0	0	6.35	0		0
Apr	0	0	0	0	0	0	0	0	0	0	6.35	0		0
May	20.14	1.01	19.14	11.48	7.66	4.81	13.48	8.67	8.67	0	9.17	0		8.67
Jun	142.42	7.12	135.3	81.18	54.12	15.87	45.43	29.56	29.56	0	31.59	0		29.56
Jul	146.65	7.33	139.32	83.59	55.73	8.48	69.02	60.54	60.54	0	31.59	0		60.54
Aug	78.77	3.94	74.83	44.9	29.93	4.24	59.6	55.35	44.9	10.45	21.14	10.45		55.35
Sep	0	0	0	0	0	1.51	21.69	20.18	0	20.18	7.62	20.18		20.18
Oct	4.83	0.24	4.59	2.76	1.84	0.03	7.23	7.2	2.76	4.44	7.66	4.44		7.2
Nov	0	0	0	0	0	0.05	0.29	0.23	0	0.23	8.94	0.23		0.23
Dec	0	0	0	0	0	0	0	0	0	0	8.94	0		0
Totals	392.83	19.64	373.18	223.91	149.27	34.98	216.73	181.74	146.43	35.3		35.3		181.73

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-54	0	0	0	0	0	0	0	0	0	0	8.94	0		0
Feb	0	0	0	0	0	0	0	0	0	0	8.94	0		0
Mar	0	0	0	0	0	0	0	0	0	0	8.94	0		0
Apr	0	0	0	0	0	0	0	0	0	0	8.94	0		0
May	76.63	3.83	72.8	43.68	29.12	5.36	23.53	18.18	18.18	0	31.59	0		18.18
Jun	157.94	7.9	150.04	90.02	60.02	5.56	49.16	43.59	43.59	0	31.59	0		43.59
Jul	68.09	3.4	64.69	38.81	25.87	6.99	79.9	72.9	38.81	34.09	1.04	31.59		70.4
Aug	0	0	0	0	0	7.34	55.05	47.71	0	47.71	0	1.04		1.04
Sep	0	0	0	0	0	2.59	16.73	14.14	0	14.14	0	0		0
Oct	0	0	0	0	0	0.66	7.41	6.74	0	6.74	2.64	0		0
Nov	0	0	0	0	0	0.1	0.43	0.33	0	0.33	3.45	0.33		0.33
Dec	0	0	0	0	0	0	0	0	0	0	5	0		0
Totals	302.66	15.13	287.52	172.51	115.01	28.6	232.2	203.6	100.58	103.01		32.96		133.54
Jan-55	0	0	0	0	0	0	0	0	0	0	5	0		0
Feb	0	0	0	0	0	0	0	0	0	0	5	0		0
Mar	0	0	0	0	0	0	0	0	0	0	5	0		0
Apr	0	0	0	0	0	0.04	1.25	1.21	0	1.21	4.83	1.21		1.21
May	45.45	2.27	43.17	25.9	17.27	8.04	26.22	18.19	18.19	0	12.94	0		18.19
Jun	152.86	7.64	145.22	87.13	58.09	14.44	41.07	26.63	26.63	0	31.59	0		26.63
Jul	151.45	7.57	143.88	86.33	57.55	8.8	75.9	67.1	67.1	0	31.59	0		67.1
Aug	124.82	6.24	118.58	71.15	47.43	8.31	56.55	48.24	48.24	0	31.59	0		48.24
Sep	0	0	0	0	0	4.75	15.69	10.93	0	10.93	22.04	10.93		10.93
Oct	0	0	0	0	0	0.19	6.67	6.47	0	6.47	21.59	6.47		6.47
Nov	0	0	0	0	0	0	0	0	0	0	21.59	0		0
Dec	0	0	0	0	0	0	0	0	0	0	21.59	0		0
Totals	474.57	23.73	450.85	270.51	180.34	44.56	223.34	178.77	160.16	18.61		18.61		178.77

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-56	0	0	0	0	0	0	0	0	0	0	21.59	0		0
Feb	0	0	0	0	0	0	0	0	0	0	21.59	0		0
Mar	0	0	0	0	0	0	0	0	0	0	21.59	0		0
Apr	0	0	0	0	0	1.29	3.44	2.14	0	2.14	21.38	2.14		2.14
May	104.39	5.22	99.17	59.5	39.67	12.13	27.01	14.87	14.87	0	31.59	0		14.87
Jun	158.94	7.95	151	90.6	60.4	1.67	53.76	52.1	52.1	0	31.59	0		52.1
Jul	114.91	5.75	109.16	65.5	43.66	14.69	68.84	54.15	54.15	0	31.59	0		54.15
Aug	115.55	5.78	109.77	65.86	43.91	10.62	49.59	38.97	38.97	0	31.59	0		38.97
Sep	55.28	2.76	52.51	31.51	21.01	0	16.73	16.73	16.73	0	31.59	0		16.73
Oct	0	0	0	0	0	0	7.46	7.46	0	7.46	24.14	7.46		7.46
Nov	0	0	0	0	0	0	0	0	0	0	24.14	0		0
Dec	0	0	0	0	0	0	0	0	0	0	24.14	0		0
Totals	549.07	27.45	521.62	312.97	208.65	40.41	226.83	186.42	176.82	9.6		9.6		186.42
Jan-57	0	0	0	0	0	0	0	0	0	0	24.14	0		0
Feb	0	0	0	0	0	0	0	0	0	0	24.14	0		0
Mar	0	0	0	0	0	0	0	0	0	0	24.14	0		0
Apr	0	0	0	0	0	0.69	0.7	0.01	0	0.01	24.13	0.01		0.01
May	0	0	0	0	0	15.38	16.25	0.87	0	0.87	24.18	0.87		0.87
Jun	108.82	5.44	103.38	62.03	41.35	6.1	40.84	34.74	34.74	0	31.59	0		34.74
Jul	164.3	8.22	156.09	93.65	62.43	2.78	68.54	65.77	65.77	0	31.59	0		65.77
Aug	91.86	4.59	87.27	52.36	34.91	18.91	62.83	43.92	43.92	0	31.59	0		43.92
Sep	18.13	0.91	17.22	10.33	6.89	2.69	20.1	17.41	10.33	7.08	24.51	7.08		17.41
Oct	0	0	0	0	0	3.04	5.69	2.65	0	2.65	22.99	2.65		2.65
Nov	0	0	0	0	0	0	0	0	0	0	23.75	0		0
Dec	0	0	0	0	0	0	0	0	0	0	23.75	0		0
Totals	383.12	19.16	363.96	218.38	145.58	49.58	214.96	165.37	154.76	10.61		10.61		165.37

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-58	0	0	0	0	0	0	0	0	0	0	23.75	0		0
Feb	0	0	0	0	0	0	0	0	0	0	23.75	0		0
Mar	0	0	0	0	0	0	0	0	0	0	23.75	0		0
Apr	0	0	0	0	0	0.15	0.4	0.25	0	0.25	23.7	0.25		0.25
May	0	0	0	0	0	22.51	29.49	6.98	0	6.98	22.07	6.98		6.98
Jun	136.62	6.83	129.79	77.88	51.92	13.64	49.64	36	36	0	31.59	0		36
Jul	144.04	7.2	136.83	82.1	54.73	10.46	64.15	53.69	53.69	0	31.59	0		53.69
Aug	103.95	5.2	98.75	59.25	39.5	5.87	55.46	49.59	49.59	0	31.59	0		49.59
Sep	14.5	0.73	13.78	8.27	5.51	1.13	16.56	15.42	8.27	7.15	24.44	7.15		15.42
Oct	0	0	0	0	0	1.59	6.94	5.35	0	5.35	22.58	5.35		5.35
Nov	0	0	0	0	0	0	0	0	0	0	22.58	0		0
Dec	0	0	0	0	0	0	0	0	0	0	22.58	0		0
Totals	399.11	19.96	379.16	227.49	151.66	55.36	222.64	167.28	147.55					167.28
Jan-59	0	0	0	0	0	0	0	0	0	0	22.58	0		0
Feb	0	0	0	0	0	0	0	0	0	0	22.58	0		0
Mar	0	0	0	0	0	0	0	0	0	0	22.58	0		0
Apr	0	0	0	0	0	1.5	2.26	0.75	0	0.75	22.58	0.75		0.75
May	8.06	0.4	7.66	4.59	3.06	12.96	20.54	7.58	4.59	2.99	22.63	2.99		7.58
Jun	99.8	4.99	94.81	56.88	37.92	2.2	47.33	45.13	45.13	0	31.59	0		45.13
Jul	137.43	6.87	130.56	78.33	52.22	1.81	69.7	67.89	67.89	0	31.59	0		67.89
Aug	82.19	4.11	78.08	46.85	31.23	4.01	65.39	61.38	46.85	14.53	17.06	14.53		61.38
Sep	4.03	0.2	3.83	2.3	1.53	5.21	15.61	10.4	2.3	8.1	11.21	8.1		10.4
Oct	0	0	0	0	0	2.8	3.65	0.85	0	0.85	11.14	0.85		0.85
Nov	0	0	0	0	0	0	0	0	0	0	17.85	0		0
Dec	0	0	0	0	0	0	0	0	0	0	17.85	0		0
Totals	331.5	16.58	314.93	188.96	125.97	30.5	224.49	193.99	166.76					193.98

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-60	0	0	0	0	0	0	0	0	0	0	17.85	0		0
Feb	0	0	0	0	0	0	0	0	0	0	17.85	0		0
Mar	0	0	0	0	0	0	0	0	0	0	17.85	0		0
Apr	0	0	0	0	0	0	0	0	0	0	17.85	0		0
May	54.43	2.72	51.71	31.03	20.68	10.3	22.26	11.96	11.96	0	31.59	0		11.96
Jun	158.26	7.91	150.35	90.21	60.14	4.42	46.89	42.46	42.46	0	31.59	0		42.46
Jul	214.3	10.72	203.59	122.15	81.43	5.57	69.94	64.37	64.37	0	31.59	0		64.37
Aug	28.61	1.43	27.18	16.31	10.87	0	61.86	61.86	16.31	45.55	0.36	0.36		16.67
Sep	0	0	0	0	0	0.93	16.61	15.69	0	15.69	0	0		0
Oct	0	0	0	0	0	4.25	7.44	3.19	0	3.19	0.94	0.94		0.94
Nov	0	0	0	0	0	0	0	0	0	0	6.31	0		0
Dec	0	0	0	0	0	0	0	0	0	0	6.31	0		0
Totals	455.6	22.78	432.82	259.69	173.13	25.48	225.01	199.53	135.09					136.4
Jan-61	0	0	0	0	0	0	0	0	0	0	6.31	0		0
Feb	0	0	0	0	0	0	0	0	0	0	6.31	0		0
Mar	0	0	0	0	0	0	0	0	0	0	6.31	0		0
Apr	0	0	0	0	0	0.38	1.68	1.31	0	1.31	6.31	1.31		1.31
May	22.79	1.14	21.65	12.99	8.66	21.48	22.5	1.02	1.02	0	20.94	0		1.02
Jun	111.04	5.55	105.49	63.29	42.19	10.77	44.02	33.26	33.26	0	31.59	0		33.26
Jul	159.75	7.99	151.76	91.06	60.7	25.81	67.06	41.26	41.26	0	31.59	0		41.26
Aug	84.09	4.2	79.88	47.93	31.95	23.35	61.24	37.89	37.89	0	31.59	0		37.89
Sep	49.17	2.46	46.71	28.02	18.68	8.53	11.75	3.22	3.22	0	31.59	0		3.22
Oct	0	0	0	0	0	1.62	4.59	2.97	0	2.97	28.62	2.97		2.97
Nov	0	0	0	0	0	0	0	0	0	0	28.62	0		0
Dec	0	0	0	0	0	0	0	0	0	0	28.62	0		0
Totals	426.83	21.34	405.49	243.29	162.2	91.93	212.85	120.92	116.64		22			120.93

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-62	0	0	0	0	0	0	0	0	0	0	28.62	0		0
Feb	0	0	0	0	0	0	0	0	0	0	28.62	0		0
Mar	0	0	0	0	0	0	0	0	0	0	28.62	0		0
Apr	0	0	0	0	0	0	0	0	0	0	28.62	0		0
May	157.82	7.89	149.92	89.95	59.97	11.4	26.6	15.2	15.2	0	31.59	0		15.2
Jun	163.9	8.19	155.7	93.42	62.28	12.29	43.14	30.85	30.85	0	31.59	0		30.85
Jul	286.02	14.3	271.72	163.03	108.69	13.51	65.64	52.13	52.13	0	31.59	0		52.13
Aug	109.99	5.5	104.49	62.69	41.8	1.46	49.76	48.3	48.3	0	31.59	0		48.3
Sep	96.45	4.82	91.63	54.98	36.65	0.97	14.9	13.93	13.93	0	31.59	0		13.93
Oct	21.19	1.06	20.13	12.08	8.05	3.81	8.56	4.74	4.74	0	31.59	0		4.74
Nov	0	0	0	0	0	0.18	0.72	0.54	0	0.54	31.05	0.54		0.54
Dec	0	0	0	0	0	0	0	0	0	0	31.05	0		0
Totals	835.37	41.77	793.6	476.16	317.44	43.62	209.31	165.69	165.15					165.69
Jan-63	0	0	0	0	0	0	0	0	0	0	31.05	0		0
Feb	0	0	0	0	0	0	0	0	0	0	31.05	0		0
Mar	0	0	0	0	0	0	0	0	0	0	31.05	0		0
Apr	0	0	0	0	0	0.32	3.24	2.92	0	2.92	28.13	2.92		2.92
May	155.4	7.77	147.63	88.58	59.05	2.04	27.93	25.88	25.88	0	31.59	0		25.88
Jun	151.61	7.58	144.03	86.42	57.61	21.06	50.06	29	29	0	31.59	0		29
Jul	148.59	7.43	141.16	84.7	56.46	0.2	77.01	76.81	76.81	0	31.59	0		76.81
Aug	157.94	7.9	150.04	90.02	60.02	9.16	50.74	41.58	41.58	0	31.59	0		41.58
Sep	37.27	1.86	35.4	21.24	14.16	5.3	17.61	12.31	12.31	0	31.59	0		12.31
Oct	0	0	0	0	0	0.6	10.06	9.46	0	9.46	22.37	9.46		9.46
Nov	0	0	0	0	0	0.04	0.77	0.73	0	0.73	22.33	0.73		0.73
Dec	0	0	0	0	0	0	0	0	0	0	22.33	0		0
Totals	650.8	32.54	618.26	370.96	247.3	38.71	237.41	198.7	185.59					198.69

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-64	0	0	0	0	0	0	0	0	0	0	22.33	0		0
Feb	0	0	0	0	0	0	0	0	0	0	22.33	0		0
Mar	0	0	0	0	0	0	0	0	0	0	22.33	0		0
Apr	0	0	0	0	0	0.67	1.93	1.26	0	1.26	22.08	1.26		1.26
May	121.27	6.06	115.21	69.13	46.08	8.91	26.26	17.34	17.34	0	31.59	0		17.34
Jun	215.35	10.77	204.58	122.75	81.83	3.17	43.3	40.12	40.12	0	31.59	0		40.12
Jul	257.86	12.89	244.96	146.98	97.98	7.56	77.9	70.34	70.34	0	31.59	0		70.34
Aug	72.12	3.61	68.51	41.11	27.41	2.45	50.26	47.8	41.11	6.69	24.9	6.69		47.8
Sep	0	0	0	0	0	0.76	14.85	14.1	0	14.1	17.65	14.1		14.1
Oct	59.63	2.98	56.65	33.99	22.66	0	7.21	7.21	7.21	0	31.59	0		7.21
Nov	0	0	0	0	0	0	0	0	0	0	31.59	0		0
Dec	0	0	0	0	0	0	0	0	0	0	31.59	0		0
Totals	726.22	36.31	689.91	413.95	275.97	23.54	221.72	198.18	176.13					198.17
Jan-65	0	0	0	0	0	0	0	0	0	0	31.59	0		0
Feb	0	0	0	0	0	0	0	0	0	0	31.59	0		0
Mar	0	0	0	0	0	0	0	0	0	0	31.59	0		0
Apr	0	0	0	0	0	1.85	6.7	4.86	0	4.86	26.74	4.86		4.86
May	83.8	4.19	79.61	47.77	31.85	7.99	21.95	13.96	13.96	0	31.59	0		13.96
Jun	167.61	8.38	159.23	95.54	63.69	26.94	40.94	14	14	0	31.59	0		14
Jul	157.13	7.86	149.27	89.56	59.71	15.1	69.46	54.36	54.36	0	31.59	0		54.36
Aug	146.25	7.31	138.94	83.36	55.58	2.64	55.92	53.29	53.29	0	31.59	0		53.29
Sep	11.28	0.56	10.72	6.43	4.29	5	10.34	5.34	5.34	0	31.59	0		5.34
Oct	0	0	0	0	0	0.98	7.62	6.65	0	6.65	24.95	6.65		6.65
Nov	0	0	0	0	0	0	1.18	1.18	0	1.18	24.14	1.18		1.18
Dec	0	0	0	0	0	0	0	0	0	0	24.14	0		0
Totals	566.07	28.3	537.77	322.66	215.11	60.48	214.11	153.63	140.95					153.64

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-66	0	0	0	0	0	0	0	0	0	0	24.14	0		0
Feb	0	0	0	0	0	0	0	0	0	0	24.14	0		0
Mar	0	0	0	0	0	0	0	0	0	0	24.14	0		0
Apr	0	0	0	0	0	0	0	0	0	0	24.14	0		0
May	48.75	2.44	46.31	27.79	18.53	0.73	18.92	18.18	18.18	0	31.59	0		18.18
Jun	168.41	8.42	159.99	95.99	64	9.48	43.28	33.8	33.8	0	31.59	0		33.8
Jul	118.05	5.9	112.15	67.29	44.86	4.48	79.21	74.74	67.29	7.45	24.15	7.45		74.74
Aug	21.35	1.07	20.29	12.17	8.11	4	57.05	53.05	12.17	40.88	0	24.15		36.32
Sep	0	0	0	0	0	2.99	16.07	13.08	0	13.08	0	0		0
Oct	0	0	0	0	0	0.68	5.91	5.23	0	5.23	3.07	0		0
Nov	0	0	0	0	0	0	0	0	0	0	4.14	0		0
Dec	0	0	0	0	0	0	0	0	0	0	4.14	0		0
Totals	356.57	17.83	338.74	203.24	135.49	22.36	220.44	198.07	131.44					163.04
Jan-67	0	0	0	0	0	0	0	0	0	0	4.14	0		0
Feb	0	0	0	0	0	0	0	0	0	0	4.14	0		0
Mar	0	0	0	0	0	0	0	0	0	0	4.14	0		0
Apr	0	0	0	0	0	1.58	2.6	1.02	0	1.02	4.14	1.02		1.02
May	41.1	2.05	39.04	23.42	15.62	13.23	16.67	3.44	3.44	0	30.82	0		3.44
Jun	78.57	3.93	74.64	44.78	29.85	17.14	34.3	17.17	17.17	0	31.59	0		17.17
Jul	107.17	5.36	101.81	61.09	40.72	19.24	64.45	45.21	45.21	0	31.59	0		45.21
Aug	94.68	4.73	89.95	53.97	35.98	11.57	58.67	47.09	47.09	0	31.59	0		47.09
Sep	8.46	0.42	8.04	4.82	3.22	3.33	22.57	19.24	4.82	14.42	18.32	14.42		19.24
Oct	0	0	0	0	0	1.28	8.14	6.86	0	6.86	17.46	6.86		6.86
Nov	0	0	0	0	0	0	0	0	0	0	19.06	0		0
Dec	0	0	0	0	0	0	0	0	0	0	19.06	0		0
Totals	329.97	16.5	313.48	188.09	125.39	67.37	207.4	140.04	117.74					140.03

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-68	0	0	0	0	0	0	0	0	0	0	19.06	0		0
Feb	0	0	0	0	0	0	0	0	0	0	19.06	0		0
Mar	0	0	0	0	0	0	0	0	0	0	19.06	0		0
Apr	0	0	0	0	0	0.36	0.79	0.43	0	0.43	19.06	0.43		0.43
May	23.37	1.17	22.2	13.32	8.88	10.77	18.06	7.29	7.29	0	27.89	0		7.29
Jun	163.17	8.16	155.02	93.01	62.01	5.26	45.13	39.86	39.86	0	31.59	0		39.86
Jul	179.29	8.96	170.33	102.2	68.13	13.53	67.63	54.1	54.1	0	31.59	0		54.1
Aug	74.13	3.71	70.43	42.26	28.17	13.1	56.74	43.64	42.26	1.38	30.21	1.38		43.64
Sep	0	0	0	0	0	0	18.27	18.27	0	18.27	16.19	18.27		18.27
Oct	0	0	0	0	0	1.18	6.55	5.37	0	5.37	15.72	5.37		5.37
Nov	0	0	0	0	0	0	0	0	0	0	17.43	0		0
Dec	0	0	0	0	0	0	0	0	0	0	17.43	0		0
Totals	439.97	22	417.97	250.78	167.19	44.2	213.16	168.96	143.51					168.96
Jan-69	0	0	0	0	0	0	0	0	0	0	10.43	0		0
Feb	0	0	0	0	0	0	0	0	0	0	10.43	0		0
Mar	0	0	0	0	0	0	0	0	0	0	10.43	0		0
Apr	0	0	0	0	0	0.64	2.54	1.9	0	1.9	9.29	1.9		1.9
May	24.58	1.23	23.35	14.01	9.34	19.47	36.75	17.28	14.01	3.27	7.33	3.27		17.28
Jun	134.97	6.75	128.22	76.93	51.29	14.38	45.09	30.71	30.71	0	37.88	0		30.71
Jul	177.68	8.88	168.79	101.28	67.52	5.91	74.21	68.3	68.3	0	37.88	0		68.3
Aug	24.17	1.21	22.97	13.78	9.19	10.23	59.38	49.15	13.78	35.37	7.66	35.37		49.15
Sep	15.31	0.77	14.54	8.73	5.82	2.85	30.16	27.31	8.73	18.58	3.33	7.66		16.39
Oct	0	0	0	0	0	4.53	4.53	0	0	0	3.92	0		0
Nov	0	0	0	0	0	0	0	0	0	0	8.25	0		0
Dec	0	0	0	0	0	0	0	0	0	0	8.25	0		0
Totals	376.71	18.84	357.87	214.72	143.15	58.02	252.66	194.64	135.52					183.73

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-70	0	0	0	0	0	0	0	0	0	0	8.25	0		0
Feb	0	0	0	0	0	0	0	0	0	0	8.25	0		0
Mar	0	0	0	0	0	0	0	0	0	0	8.25	0		0
Apr	0	0	0	0	0	0.58	2.04	1.46	0	1.46	7.75	1.46		1.46
May	38.68	1.93	36.74	22.05	14.7	6.9	27.7	20.8	20.8	0	11.13	0		20.8
Jun	97.1	4.85	92.24	55.35	36.9	14.25	50.99	36.74	36.74	0	29.74	0		36.74
Jul	136.58	6.83	129.75	77.85	51.9	17.02	70.27	53.25	53.25	0	37.88	0		53.25
Aug	123.69	6.18	117.51	70.5	47	6.5	65.17	58.67	58.67	0	37.88	0		58.67
Sep	14.1	0.71	13.4	8.04	5.36	7.27	26.99	19.73	8.04	11.69	26.19	11.69		19.73
Oct	0	0	0	0	0	1.82	5.19	3.37	0	3.37	22.82	3.37		3.37
Nov	0	0	0	0	0	0	0	0	0	0	22.82	0		0
Dec	0	0	0	0	0	0	0	0	0	0	22.82	0		0
Totals	410.15	20.51	389.64	233.79	155.86	54.33	248.35	194.02	177.5		20.68			194.02
Jan-71	0	0	0	0	0	0	0	0	0	0	22.82	0		0
Feb	0	0	0	0	0	0	0	0	0	0	22.82	0		0
Mar	0	0	0	0	0	0	0	0	0	0	22.82	0		0
Apr	0	0	0	0	0	6.18	6.47	0.3	0	0.3	22.52	0.3		0.3
May	18.53	0.93	17.61	10.56	7.04	11.18	30.04	18.86	10.56	8.3	16.09	8.3		18.86
Jun	174.86	8.74	166.12	99.67	66.45	0.79	57.21	56.42	56.42	0	37.88	0		56.42
Jul	115.63	5.78	109.85	65.91	43.94	3.37	65.65	62.28	62.28	0	37.88	0		62.28
Aug	85.82	4.29	81.53	48.92	32.61	0.72	62.68	61.96	48.92	13.04	24.84	13.04		61.96
Sep	11.28	0.56	10.72	6.43	4.29	11.54	20.25	8.71	6.43	2.28	22.56	2.28		8.71
Oct	0	0	0	0	0	1.33	4.65	3.32	0	3.32	19.25	3.32		3.32
Nov	0	0	0	0	0	0	0	0	0	0	22.08	0		0
Dec	0	0	0	0	0	0	0	0	0	0	22.08	0		0
Totals	406.12	20.31	385.82	231.49	154.33	35.11	246.95	211.84	184.61					211.85

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-72	0	0	0	0	0	0	0	0	0	0	22.08	0		0
Feb	0	0	0	0	0	0	0	0	0	0	22.08	0		0
Mar	0	0	0	0	0	0	0	0	0	0	22.08	0		0
Apr	0	0	0	0	0	0	0	0	0	0	22.08	0		0
May	74.54	3.73	70.81	42.49	28.32	2.81	33.88	31.06	31.06	0	33.5	0		31.06
Jun	103.14	5.16	97.98	58.79	39.19	8.9	57.85	48.95	48.95	0	37.88	0		48.95
Jul	137.79	6.89	130.9	78.54	52.36	4.78	64.67	59.88	59.88	0	37.88	0		59.88
Aug	14.5	0.73	13.78	8.27	5.51	13.36	56.86	43.5	8.27	35.23	6.76	35.23		43.5
Sep	0	0	0	0	0	2.22	27.75	25.53	0	25.53	0.64	6.76		6.76
Oct	0	0	0	0	0	1.95	12.53	10.58	0	10.58	1.11	0.64		0.64
Nov	0	0	0	0	0	0	0	0	0	0	1.64	0		0
Dec	0	0	0	0	0	0	0	0	0	0	1.64	0		0
Totals	329.97	16.5	313.48	188.09	125.39	34.03	253.54	219.51	148.17		0.64			190.79
Jan-73	0	0	0	0	0	0	0	0	0	0	1.64	0		0
Feb	0	0	0	0	0	0	0	0	0	0	1.64	0		0
Mar	0	0	0	0	0	0	0	0	0	0	1.64	0		0
Apr	0	0	0	0	0	1.86	6.16	4.3	0	4.3	1.64	1.64		1.64
May	6.85	0.34	6.51	3.9	2.6	8.33	32.28	23.95	3.9	20.05	2.31	1.64		5.54
Jun	150.68	7.53	143.15	85.89	57.26	1.89	55.64	53.76	53.76	0	34.44	0		53.76
Jul	144.64	7.23	137.41	82.45	54.96	16.08	65.45	49.37	49.37	0	37.88	0		49.37
Aug	94.28	4.71	89.56	53.74	35.83	0.64	63.8	63.17	53.74	9.43	28.45	9.43		63.17
Sep	0	0	0	0	0	7.39	26.13	18.73	0	18.73	11.57	18.73		18.73
Oct	0	0	0	0	0	1.49	14.78	13.29	0	13.29	6.73	11.57		11.57
Nov	0	0	0	0	0	0	0	0	0	0	7.11	0		0
Dec	0	0	0	0	0	0	0	0	0	0	7.11	0		0
Totals	396.45	19.82	376.63	225.98	150.65	37.67	264.24	226.57	160.77		3.97			203.78

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-74	0	0	0	0	0	0	0	0	0	0	7.11	0		0
Feb	0	0	0	0	0	0	0	0	0	0	7.11	0		0
Mar	0	0	0	0	0	0	0	0	0	0	7.11	0		0
Apr	0	0	0	0	0	2.83	8.49	5.66	0	5.66	7.1	5.66		5.66
May	92.67	4.63	88.03	52.82	35.21	0	40.56	40.56	40.56	0	19.43	0		40.56
Jun	92.67	4.63	88.03	52.82	35.21	17.7	56.72	39.02	39.02	0	33.23	0		39.02
Jul	176.47	8.82	167.65	100.59	67.06	11.31	73.92	62.61	62.61	0	37.88	0		62.61
Aug	62.85	3.14	59.71	35.83	23.88	0.08	50.85	50.77	35.83	14.94	22.93	14.94		50.77
Sep	0	0	0	0	0	4.8	25.55	20.75	0	20.75	8.43	20.75		20.75
Oct	0	0	0	0	0	7.93	15.88	7.96	0	7.96	7.17	7.96		7.96
Nov	0	0	0	0	0	0	0	0	0	0	7.17	0		0
Dec	0	0	0	0	0	0	0	0	0	0	7.17	0		0
Totals	424.65	21.23	403.42	242.05	161.37	44.64	271.97	227.33	178.01					227.33
Jan-75	0	0	0	0	0	0	0	0	0	0	7.17	0		0
Feb	0	0	0	0	0	0	0	0	0	0	7.17	0		0
Mar	0	0	0	0	0	0	0	0	0	0	7.17	0		0
Apr	0	0	0	0	0	1.02	2.48	1.46	0	1.46	7.18	1.46		1.46
May	56	2.8	53.2	31.92	21.28	17.9	26.58	8.68	8.68	0	33.51	0		8.68
Jun	95.49	4.77	90.71	54.43	36.28	10.52	48.66	38.14	38.14	0	37.88	0		38.14
Jul	243.35	12.17	231.18	138.71	92.47	6.36	71.03	64.67	64.67	0	37.88	0		64.67
Aug	164.38	8.22	156.16	93.7	62.47	17.24	60.31	43.07	43.07	0	37.88	0		43.07
Sep	0	0	0	0	0	1.68	28.68	27	0	27	14.37	27		27
Oct	0	0	0	0	0	2.53	11.25	8.72	0	8.72	10.23	8.72		8.72
Nov	0	0	0	0	0	0	0	0	0	0	11.09	0		0
Dec	0	0	0	0	0	0	0	0	0	0	11.09	0		0
Totals	559.22	27.96	531.26	318.76	212.5	57.27	249	191.73	154.56					191.74

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-76	0	0	0	0	0	0	0	0	0	0	11.09	0		0
Feb	0	0	0	0	0	0	0	0	0	0	11.09	0		0
Mar	0	0	0	0	0	0	0	0	0	0	11.09	0		0
Apr	0	0	0	0	0	3.8	10.71	6.91	0	6.91	8.1	6.91		6.91
May	47.94	2.4	45.55	27.33	18.22	5.99	33.05	27.06	27.06	0	9.22	0		27.06
Jun	113.62	5.68	107.94	64.76	43.17	5.93	52.26	46.32	46.32	0	27.65	0		46.32
Jul	183.32	9.17	174.15	104.49	69.66	7.23	74	66.77	66.77	0	37.88	0		66.77
Aug	137.79	6.89	130.9	78.54	52.36	11.48	57.22	45.75	45.75	0	37.88	0		45.75
Sep	72.92	3.65	69.28	41.57	27.71	8.46	28.18	19.72	19.72	0	37.88	0		19.72
Oct	0	0	0	0	0	0.33	6.22	5.89	0	5.89	31.99	5.89		5.89
Nov	0	0	0	0	0	0	0	0	0	0	31.99	0		0
Dec	0	0	0	0	0	0	0	0	0	0	31.99	0		0
Totals	555.6	27.78	527.82	316.69	211.13	43.23	261.65	218.42	205.62					218.42
Jan-77	0	0	0	0	0	0	0	0	0	0	31.99	0		0
Feb	0	0	0	0	0	0	0	0	0	0	31.99	0		0
Mar	0	0	0	0	0	0	0	0	0	0	31.99	0		0
Apr	0	0	0	0	0	7.5	14.22	6.71	0	6.71	25.28	6.71		6.71
May	18.13	0.91	17.22	10.33	6.89	6.4	39.65	33.25	10.33	22.92	10.25	22.92		33.25
Jun	163.58	8.18	155.4	93.24	62.16	1.85	67.3	65.46	65.46	0	37.88	0		65.46
Jul	5.64	0.28	5.36	3.22	2.14	34.9	75.17	40.27	3.22	37.05	5.53	37.05		40.27
Aug	0	0	0	0	0	7.03	53.09	46.06	0	46.06	0	5.53		5.53
Sep	0	0	0	0	0	0.19	32.99	32.8	0	32.8	0	0		0
Oct	0	0	0	0	0	0.11	11	10.88	0	10.88	0.04	0		0
Nov	0	0	0	0	0	0.02	0.13	0.11	0	0.11	0.08	0.04		0.04
Dec	0	0	0	0	0	0	0	0	0	0	1.01	0		0
Totals	187.35	9.37	177.98	106.79	71.19	58	293.55	235.54	79.01		0			151.26

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-78	0	0	0	0	0	0	0	0	0	0	1.01	0		0
Feb	0	0	0	0	0	0	0	0	0	0	1.01	0		0
Mar	0	0	0	0	0	0	0	0	0	0	1.01	0		0
Apr	0	0	0	0	0	0	0	0	0	0	1.01	0		0
May	0	0	0	0	0	19.29	24.04	4.76	0	4.76	0.37	1.01		1.01
Jun	116.84	5.84	111	66.6	44.4	8.68	54.42	45.75	45.75	0	22.06	0		45.75
Jul	273.16	13.66	259.51	155.7	103.8	7.14	73.28	66.14	66.14	0	37.88	0		66.14
Aug	139.4	6.97	132.43	79.46	52.97	5.08	57.9	52.82	52.82	0	37.88	0		52.82
Sep	0	0	0	0	0	0.06	32.28	32.22	0	32.22	11.67	32.22		32.22
Oct	0	0	0	0	0	4.9	10.71	5.81	0	5.81	8.64	5.81		5.81
Nov	0	0	0	0	0	0	0	0	0	0	9.6	0		0
Dec	0	0	0	0	0	0	0	0	0	0	9.6	0		0
Totals	529.41	26.47	502.94	301.76	201.17	45.14	252.63	207.49	164.71					203.75
Jan-79	0	0	0	0	0	0	0	0	0	0	9.6	0		0
Feb	0	0	0	0	0	0	0	0	0	0	9.6	0		0
Mar	0	0	0	0	0	0	0	0	0	0	9.6	0		0
Apr	0	0	0	0	0	0	0	0	0	0	9.6	0		0
May	0	0	0	0	0	15.86	22.96	7.09	0	7.09	7.17	7.09		7.09
Jun	16.52	0.83	15.69	9.42	6.28	17.8	51.33	33.53	9.42	24.11	5.82	7.17		16.59
Jul	116.44	5.82	110.62	66.37	44.25	6.6	71.88	65.28	65.28	0	6.91	0		65.28
Aug	100.72	5.04	95.69	57.41	38.28	18.24	56.05	37.81	37.81	0	26.52	0		37.81
Sep	32.63	1.63	31	18.6	12.4	4.96	33.35	28.39	18.6	9.79	16.73	9.79		28.39
Oct	0	0	0	0	0	2.83	14.12	11.29	0	11.29	6.76	11.29		11.29
Nov	0	0	0	0	0	0	0	0	0	0	7.59	0		0
Dec	0	0	0	0	0	0	0	0	0	0	7.59	0		0
Totals	266.32	13.32	253	151.8	101.2	66.3	249.68	183.39	131.1					166.45

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-80	0	0	0	0	0	0	0	0	0	0	7.59	0		0
Feb	0	0	0	0	0	0	0	0	0	0	7.59	0		0
Mar	0	0	0	0	0	0	0	0	0	0	7.59	0		0
Apr	0	0	0	0	0	2.79	4.42	1.63	0	1.63	7.19	1.63		1.63
May	0	0	0	0	0	16.15	30.11	13.96	0	13.96	6.88	7.19		7.19
Jun	52.38	2.62	49.76	29.85	19.9	0	60.14	60.14	29.85	30.29	5.09	6.88		36.73
Jul	75.74	3.79	71.96	43.17	28.78	8.15	76.16	68.01	43.17	24.84	0.01	5.09		48.26
Aug	46.74	2.34	44.4	26.64	17.76	3.98	60.34	56.36	26.64	29.72	0	0.01		26.65
Sep	0	0	0	0	0	3.26	31.26	27.99	0	27.99	0	0		0
Oct	0	0	0	0	0	1.85	10.51	8.67	0	8.67	0	0		0
Nov	0	0	0	0	0	0	0	0	0	0	0.61	0		0
Dec	0	0	0	0	0	0	0	0	0	0	0.61	0		0
Totals	174.86	8.74	166.12	99.67	66.45	36.18	272.94	236.76	99.67					120.46
Jan-81	0	0	0	0	0	0	0	0	0	0	0.61	0		0
Feb	0	0	0	0	0	0	0	0	0	0	0.61	0		0
Mar	0	0	0	0	0	0	0	0	0	0	0.61	0		0
Apr	0	0	0	0	0	4.08	19.43	15.35	0	15.35	0.62	0.61		0.61
May	0	0	0	0	0	18.85	30.49	11.65	0	11.65	1.67	0.62		0.62
Jun	51.17	2.56	48.61	29.17	19.44	2.15	59.05	56.9	29.17	27.73	0.31	1.67		30.84
Jul	131.75	6.59	125.16	75.1	50.06	13.27	72.62	59.35	59.35	0	16.05	0		59.35
Aug	0	0	0	0	0	9.53	58.89	49.36	0	49.36	0	16.05		16.05
Sep	0	0	0	0	0	5.78	33.72	27.94	0	27.94	0	0		0
Oct	0	0	0	0	0	2.44	11.99	9.55	0	9.55	0	0		0
Nov	0	0	0	0	0	0	0.67	0.67	0	0.67	0.71	0		0
Dec	0	0	0	0	0	0	0	0	0	0	0.71	0		0
Totals	182.92	9.15	173.77	104.26	69.51	56.1	286.88	230.78	88.52					107.47

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-82	0	0	0	0	0	0	0	0	0	0	0.71	0		0
Feb	0	0	0	0	0	0	0	0	0	0	0.71	0		0
Mar	0	0	0	0	0	0	0	0	0	0	0.71	0		0
Apr	0	0	0	0	0	0	0	0	0	0	0.71	0		0
May	0	0	0	0	0	18.51	27.31	8.8	0	8.8	0.72	0.71		0.71
Jun	0	0	0	0	0	22.72	46.02	23.3	0	23.3	0	0.72		0.72
Jul	96.7	4.83	91.86	55.12	36.74	28.9	70.06	41.17	41.17	0	13.95	0		41.17
Aug	129.33	6.47	122.86	73.72	49.15	2.84	65.49	62.65	62.65	0	25.02	0		62.65
Sep	0	0	0	0	0	14.38	27.45	13.08	0	13.08	11.94	13.08		13.08
Oct	0	0	0	0	0	1.58	8.09	6.51	0	6.51	6.98	6.51		6.51
Nov	0	0	0	0	0	0	0	0	0	0	7.68	0		0
Dec	0	0	0	0	0	0	0	0	0	0	7.68	0		0
Totals	226.03	11.3	214.72	128.83	85.89	88.92	244.42	155.51	103.81					124.84
Jan-83	0	0	0	0	0	0	0	0	0	0	7.68	0		0
Feb	0	0	0	0	0	0	0	0	0	0	7.68	0		0
Mar	0	0	0	0	0	0	0	0	0	0	7.68	0		0
Apr	0	0	0	0	0	1.1	1.1	0	0	0	7.67	0		0
May	0	0	0	0	0	12.12	23.59	11.46	0	11.46	9.22	7.67		7.67
Jun	7.25	0.36	6.89	4.13	2.76	19.22	46.52	27.3	4.13	23.17	5.86	9.22		13.35
Jul	103.95	5.2	98.75	59.25	39.5	10.62	70.88	60.26	59.25	1.01	5.86	1.01		60.26
Aug	51.97	2.6	49.38	29.63	19.75	7.02	70.17	63.16	29.63	33.53	0	5.86		35.49
Sep	28.2	1.41	26.79	16.08	10.72	0.93	29.09	28.16	16.08	12.08	0	0		16.08
Oct	0	0	0	0	0	0.14	6.19	6.05	0	6.05	0	0		0
Nov	0	0	0	0	0	0	0	0	0	0	0.25	0		0
Dec	0	0	0	0	0	0	0	0	0	0	0.25	0		0
Totals	191.38	9.57	181.81	109.08	72.72	51.16	247.54	196.39	109.08					132.85

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-84	0	0	0	0	0	0	0	0	0	0	0.19	0		0
Feb	0	0	0	0	0	0	0	0	0	0	0.19	0		0
Mar	0	0	0	0	0	0	0	0	0	0	0.19	0		0
Apr	0	0	0	0	0	1.05	1.6	0.55	0	0.55	0.11	0.19		0.19
May	0	0	0	0	0	9.38	33.15	23.76	0	23.76	1.73	0.11		0.11
Jun	97.9	4.9	93.01	55.81	37.2	12.75	47.02	34.27	34.27	0	23.27	0		34.27
Jul	157.13	7.86	149.27	89.56	59.71	12.94	70.86	57.92	57.92	0	30.37	0		57.92
Aug	77.76	3.89	73.87	44.32	29.55	3.41	57.2	53.79	44.32	9.47	20.9	9.47		53.79
Sep	66.08	3.3	62.77	37.66	25.11	3.07	22.53	19.46	19.46	0	29.27	0		19.46
Oct	0	0	0	0	0	0.2	0.34	0.13	0	0.13	30.24	0.13		0.13
Nov	0	0	0	0	0	0	0	0	0	0	30.24	0		0
Dec	0	0	0	0	0	0	0	0	0	0	30.24	0		0
Totals	398.87	19.94	378.93	227.36	151.57	42.8	232.69	189.89	155.97					165.87
Jan-85	0	0	0	0	0	0	0	0	0	0	30.24	0		0
Feb	0	0	0	0	0	0	0	0	0	0	30.24	0		0
Mar	0	0	0	0	0	0	0	0	0	0	30.24	0		0
Apr	0	0	0	0	0	6.1	14.46	8.36	0	8.36	21.87	8.36		8.36
May	0	0	0	0	0	5.49	35.72	30.23	0	30.23	5.09	21.87		21.87
Jun	109.99	5.5	104.49	62.69	41.8	16	53.22	37.22	37.22	0	30.37	0		37.22
Jul	139	6.95	132.05	79.23	52.82	22.52	68.48	45.96	45.96	0	30.37	0		45.96
Aug	25.38	1.27	24.11	14.47	9.65	0.93	48.41	47.48	14.47	33.01	7.28	30.37		44.84
Sep	0	0	0	0	0	5.12	20.84	15.71	0	15.71	6.35	7.28		7.28
Oct	0	0	0	0	0	1.98	5.96	3.98	0	3.98	8.21	3.98		3.98
Nov	0	0	0	0	0	0	0	0	0	0	10.83	0		0
Dec	0	0	0	0	0	0	0	0	0	0	10.83	0		0
Totals	274.37	13.72	260.66	156.39	104.26	58.14	247.08	188.94	97.64					169.51

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		(13)
Year Month	**River Supply**	**Convey-ance Loss**	**Farm Surf. Water Supply**	**Surface Water Avail. for CU**	**Surf. Water DP & Runoff**	**Effective Rainfall to CU**	**Potential Crop CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Surface Water Stored in Soil Moisture Reservoir**	**HCU from Soil Moisture**		**Total HCU**
Jan-86	0	0	0	0	0	0	0	0	0	0	10.83	0		0
Feb	0	0	0	0	0	0	0	0	0	0	10.83	0		0
Mar	0	0	0	0	0	0	0	0	0	0	10.83	0		0
Apr	0	0	0	0	0	3.62	8.59	4.97	0	4.97	9.82	4.97		4.97
May	43.11	2.16	40.95	24.57	16.38	7.23	29.32	22.09	22.09	0	12.82	0		22.09
Jun	84.61	4.23	80.38	48.23	32.15	7.35	54.12	46.76	46.76	0	14.28	0		46.76
Jul	130.14	6.51	123.63	74.18	49.45	6.41	67.65	61.24	61.24	0	27.22	0		61.24
Aug	56.41	2.82	53.59	32.15	21.43	7.39	55.57	48.19	32.15	16.04	11.18	16.04		48.19
Sep	10.07	0.5	9.57	5.74	3.83	2.86	22.18	19.32	5.74	13.58	5.95	11.18		16.92
Oct	0	0	0	0	0	3.82	8.57	4.76	0	4.76	6.97	4.76		4.76
Nov	0	0	0	0	0	0	0	0	0	0	9.09	0		0
Dec	0	0	0	0	0	0	0	0	0	0	9.09	0		0
Totals	324.33	16.22	308.12	184.87	123.25	38.68	246.01	207.33	167.99					204.93

AIII.5. Average 1950-1986 Historic Consumptive Use (HCU) and Return Flow Obligation

Average 1950-1986 HCU for 123 acre Farm

	(1)	(2)	(3)	(4)	(5)
	Average Total Deep Percolation and Runoff Return Flows	**Average Unlagged Deep Percolation Return Flow**	**Average Lagged Deep Percolation Return Flow**	**Average Surface Return Flows**	**Average HCU for Average of 123 acres**
	[acre-ft.]	[acre-ft.]	[acre-ft.]	[acre-ft.]	[acre-ft.]
Jan	0.00	0.00	0.01	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.00	1.61
May	15.01	7.51	4.36	7.51	13.07
Jun	44.68	22.34	15.71	22.34	35.56
Jul	56.47	28.24	24.88	28.24	58.72
Aug	29.03	14.52	19.81	14.52	42.53
Sep	5.67	2.84	8.43	2.84	12.80
Oct	0.88	0.44	2.19	0.44	4.16
Nov	0.00	0.00	0.42	0.00	0.08
Dec	0.00	0.00	0.06	0.00	0.00
	151.74	75.87	75.87	75.87	168.54

AIII.5. Average 1950-1986 Historic Consumptive Use (HCU) and Return Flow Obligation

Average HCU 1950-1986 HCU for 19 of 26 Shares of Hill & Brush (90.57 acres of Dry Up)

	(6)	(7)	(8)	(9)	(10)	(11)
	Average Total Deep Percolation and Runoff Return Flows	**Average Unlagged Deep Percolation Return Flow**	**Average Lagged Deep Percolation Return Flow**	**Average Surface Return Flows**	**Total Return Flow Obligation**	**Average HCU for Average of 95.68 acres**
	[acre-ft.]	[acre-ft.]	[acre-ft.]	[acre-ft.]	[acre-ft.]	[acre-ft.]
Jan	0.00	0.00	0.01	0.00	0.01	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.00	0.00	1.18
May	10.97	5.48	3.19	5.48	8.67	9.55
Jun	32.65	16.33	11.48	16.33	27.81	25.99
Jul	41.27	20.63	18.19	20.63	38.82	42.91
Aug	21.22	10.61	14.48	10.61	25.09	31.08
Sep	4.14	2.07	6.16	2.07	8.23	9.36
Oct	0.64	0.32	1.60	0.32	1.92	3.04
Nov	0.00	0.00	0.31	0.00	0.31	0.06
Dec	0.00	0.00	0.04	0.00	0.04	0.00
	110.89	55.45	55.45	55.45	110.89	123.17

Notes:

(1) = 1950-1986 Average of Column (5) of AIII.3
(2) = Column (1) *0.5
(3) = Column (2) Lagged using IDS AWAS (see AIII.6)
(4) = Column (1) *0.5
(5) = 1950-1986 Average of Column (13) of AIII.3

(6) = Column (1) * 19/26
(7) = Column (2) * 19/26
(8) = Column (3) * 19/26
(9) = Column (4) * 19/26
(10) = Column (8) + Column (9)
(11) = Column (5) * 19/26

AIII.6. Average Historic (1950-1986) Deep Percolation IDS AWAS Output

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1300	67,325.00	0.2	694

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
1	0.00	0.00	0.00
2	0.00	0.00	0.00
3	0.00	0.00	0.00
4	0.00	0.00	0.00
5	0.11	4.36	4.36
6	0.34	20.07	15.71
7	0.45	44.96	24.88
8	0.27	64.77	19.81
9	0.08	73.20	8.43
10	0.02	75.39	2.19
11	0.00	75.81	0.42
12	0.00	75.86	0.06
13	0.00	75.87	0.01
14	0.00	75.87	0.00
15	0.00	75.87	0.00
16	0.00	75.87	0.00
17	0.11	80.23	4.36
18	0.34	95.94	15.71
19	0.45	120.83	24.88
20	0.27	140.64	19.81
21	0.08	149.07	8.43
22	0.02	151.26	2.19
23	0.00	151.68	0.42
24	0.00	151.74	0.06
25	0.00	151.74	0.01
26	0.00	151.74	0.00
27	0.00	151.74	0.00
28	0.00	151.74	0.00
29	0.11	156.11	4.36
30	0.34	171.82	15.71
31	0.45	196.70	24.88
32	0.27	216.52	19.81
33	0.08	224.95	8.43
34	0.02	227.13	2.19
35	0.00	227.55	0.42
36	0.00	227.61	0.06
37	0.00	227.61	0.01
38	0.00	227.62	0.00
39	0.00	227.62	0.00
40	0.00	227.62	0.00
41	0.11	231.98	4.36
42	0.34	247.69	15.71
43	0.45	272.57	24.88
44	0.27	292.39	19.81
45	0.08	300.82	8.43

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1300	67,325.00	0.2	694

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
46	0.02	303.00	2.19
47	0.00	303.42	0.42
48	0.00	303.48	0.06
49	0.00	303.49	0.01
50	0.00	303.49	0.00
51	0.00	303.49	0.00
52	0.00	303.49	0.00
53	0.11	307.85	4.36
54	0.34	323.56	15.71
55	0.45	348.44	24.88
56	0.27	368.26	19.81
57	0.08	376.69	8.43
58	0.02	378.88	2.19
59	0.00	379.29	0.42
60	0.00	379.35	0.06
61	0.00	379.36	0.01
62	0.00	379.36	0.00
63	0.00	379.36	0.00
64	0.00	379.36	0.00
65	0.11	383.72	4.36
66	0.34	399.43	15.71
67	0.45	424.32	24.88
68	0.27	444.13	19.81
69	0.08	452.56	8.43
70	0.02	454.75	2.19
71	0.00	455.17	0.42
72	0.00	455.22	0.06
73	0.00	455.23	0.01
74	0.00	455.23	0.00
75	0.00	455.23	0.00
76	0.00	455.23	0.00
77	0.11	459.59	4.36
78	0.34	475.30	15.71
79	0.45	500.19	24.88
80	0.27	520.00	19.81
81	0.08	528.43	8.43
82	0.02	530.62	2.19
83	0.00	531.04	0.42
84	0.00	531.09	0.06
85	0.00	531.10	0.01
86	0.00	531.10	0.00
87	0.00	531.10	0.00
88	0.00	531.10	0.00
89	0.11	535.47	4.36
90	0.34	551.17	15.71

AIII.6. Average Historic (1950-1986) Deep Percolation IDS AWAS Output

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1300	67,325.00	0.2	694

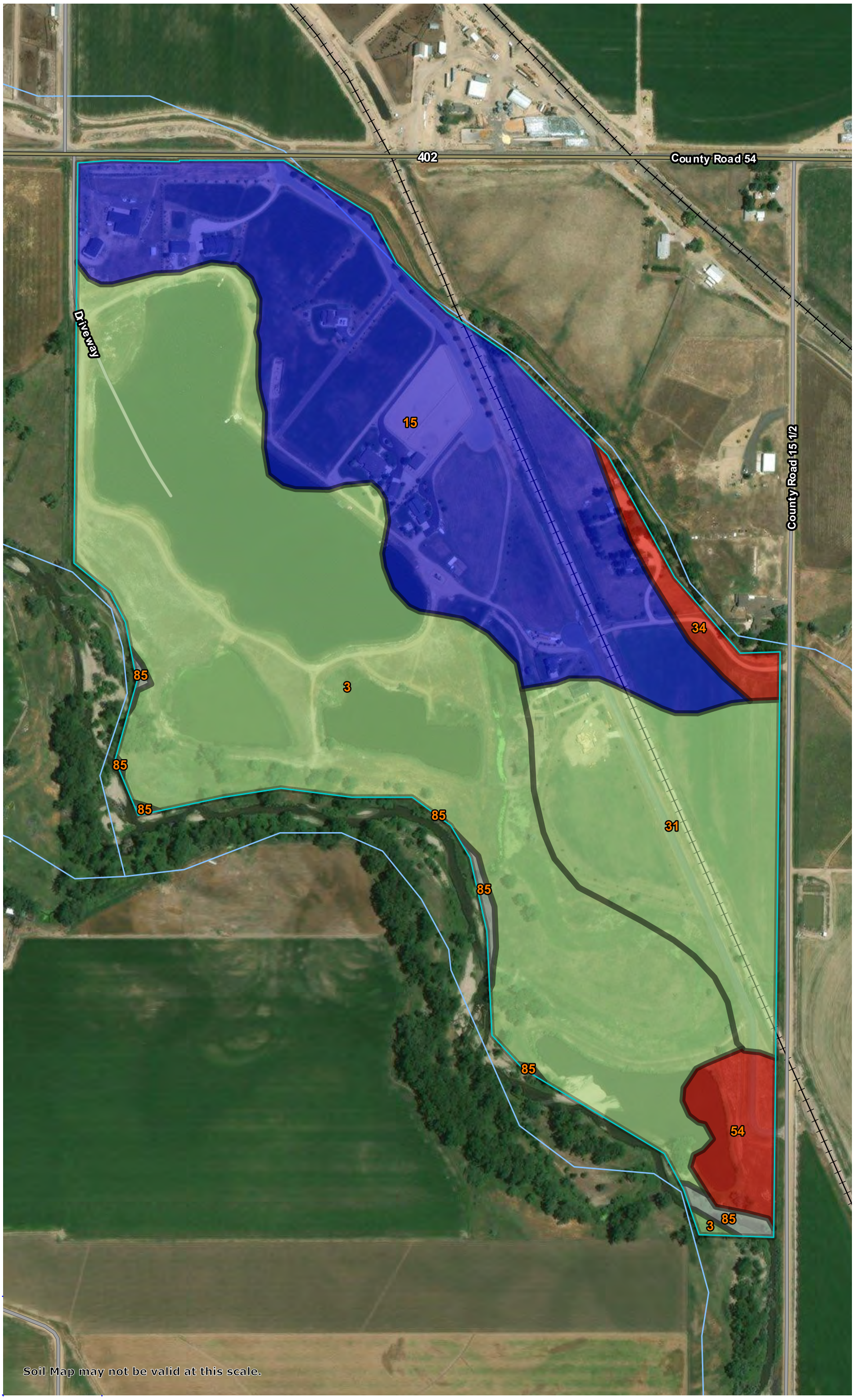
Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
91	0.45	576.06	24.88
92	0.27	595.87	19.81
93	0.08	604.30	8.43
94	0.02	606.49	2.19
95	0.00	606.91	0.42
96	0.00	606.97	0.06
97	0.00	606.97	0.01
98	0.00	606.98	0.00
99	0.00	606.98	0.00
100	0.00	606.98	0.00
101	0.11	611.34	4.36
102	0.34	627.05	15.71
103	0.45	651.93	24.88
104	0.27	671.75	19.81
105	0.08	680.18	8.43
106	0.02	682.36	2.19
107	0.00	682.78	0.42
108	0.00	682.84	0.06
109	0.00	682.85	0.01
110	0.00	682.85	0.00
111	0.00	682.85	0.00
112	0.00	682.85	0.00
113	0.11	687.21	4.36
114	0.34	702.92	15.71
115	0.45	727.80	24.88
116	0.27	747.62	19.81
117	0.08	756.05	8.43
118	0.02	758.24	2.19
119	0.00	758.65	0.42
120	0.00	758.71	0.06

AIII.7 NCRS Soil Survey Available Water Capacity - Pfeif/Challenger Farm

104° 55' 38" W

104° 54' 58" W

40° 22' 45" N



40° 21' 55" N

104° 55' 38" W

104° 54' 58" W

Map Scale: 1:4,320 if printed on B portrait (11" x 17") sheet.

N

Meters: 0 50 100 200 300

Feet: 0 200 400 800 1200

Map projection: Web Mercator Corner coordinates: WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

<= 0.15

> 0.15 and <= 0.16

> 0.16 and <= 0.18

Not rated or not available

Soil Rating Lines

<= 0.15

> 0.15 and <= 0.16

> 0.16 and <= 0.18

Not rated or not available

Soil Rating Points

<= 0.15

> 0.15 and <= 0.16

> 0.16 and <= 0.18

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Weld County, Colorado, Southern Part
Survey Area Data: Version 16, Oct 10, 2017

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 20, 2015—Oct 15, 2016

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Available Water Capacity

Map unit symbol	Map unit name	Rating (centimeters per centimeter)	Acres in AOI	Percent of AOI
3	Aquolls and Aquents, gravelly substratum	0.16	62.1	48.0%
15	Colby loam, 1 to 3 percent slopes	0.18	41.6	32.1%
31	Kim loam, 0 to 1 percent slopes	0.16	18.4	14.2%
34	Kim loam, 5 to 9 percent slopes	0.15	2.4	1.8%
54	Paoli loam, 0 to 1 percent slopes	0.15	3.7	2.9%
85	Water		1.2	0.9%
Totals for Area of Interest			**129.3**	**100.0%**

Description

Available water capacity (AWC) refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in centimeters of water per centimeter of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure, with corrections for salinity and rock fragments. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. It is not an estimate of the quantity of water actually available to plants at any given time.

Available water supply (AWS) is computed as AWC times the thickness of the soil. For example, if AWC is 0.15 cm/cm, the available water supply for 25 centimeters of soil would be 0.15 x 25, or 3.75 centimeters of water.

For each soil layer, AWC is recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters per centimeter

Aggregation Method: Dominant Component

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options (Horizon Aggregation Method): Depth Range (Weighted Average)

Top Depth: 0

Bottom Depth: 48

Units of Measure: Inches

APPENDIX IV

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1950	0	0	0	23	3	1	31	31	20	22	0	0	131
1951	0	0	0	30	6	0	19	13	26	31	0	0	125
1952	0	0	0	30	25	19	31	25	0	1	0	0	131
1953	0	0	0	30	10	4	20	4	20	0	0	0	88
1954	0	0	0	3	0	0	0	0	0	8	0	0	11
1955	0	0	0	11	12	0	0	11	30	8	0	0	72
1956	0	0	0	0	0	0	0	7	0	0	0	0	7
1957	0	0	0	30	31	30	31	31	30	31	0	0	214
1958	0	0	0	30	31	30	11	31	30	31	0	0	194
1959	0	0	0	30	31	12	4	0	1	31	0	0	109
1960	0	0	0	25	28	24	31	1	0	13	0	0	122
1961	0	0	0	29	19	25	26	29	13	31	0	0	172
1962	0	0	0	23	27	26	0	0	0	0	0	0	76
1963	0	0	0	0	0	15	0	0	11	22	0	0	48
1964	0	0	0	0	0	0	0	0	0	0	0	0	0
1965	0	0	0	0	0	0	20	16	30	31	0	0	97
1966	0	0	0	30	31	30	2	0	22	11	0	0	126
1967	0	0	0	0	2	30	28	1	30	31	0	0	122
1968	0	0	0	30	14	14	0	0	0	16	0	0	74
1969	0	0	0	21	24	30	23	1	13	31	0	0	143
1970	0	0	0	30	29	30	5	0	16	31	0	0	141
1971	0	0	0	30	31	28	0	0	12	31	0	0	132
1972	0	0	0	20	8	14	0	0	29	31	0	0	102
1973	0	0	0	30	31	30	10	31	30	31	0	0	193
1974	0	0	0	29	7	22	3	20	27	30	0	0	138
1975	0	0	0	21	3	27	10	0	0	30	0	0	91
1976	0	0	0	14	15	7	0	0	6	0	0	0	42
1977	0	0	0	0	0	0	4	6	5	0	0	0	15
1978	0	0	0	0	5	0	0	0	0	0	0	0	5
1979	0	0	0	1	29	29	23	30	29	30	0	0	171
1980	0	0	0	30	31	30	9	0	19	21	0	0	140
1981	0	0	0	0	0	0	3	0	22	30	0	0	55
1982	0	0	0	0	3	7	5	0	16	30	0	0	61
1983	0	0	0	29	30	29	30	30	29	30	0	0	207
1984	0	0	0	30	31	30	24	8	23	31	0	0	177

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1985	0	0	0	29	30	29	12	7	23	30	0	0	160
1986	0	0	0	29	30	27	7	0	27	30	0	0	150
1987	0	0	0	29	30	25	13	27	29	30	0	0	183
1988	0	0	0	30	27	21	5	0	23	31	0	0	137
1989	0	0	0	22	2	14	0	0	21	30	0	0	89
1990	0	0	0	29	30	23	1	23	14	30	0	0	150
1991	0	0	0	29	14	23	2	0	19	30	0	0	117
1992	0	0	0	28	0	16	0	7	30	31	0	0	112
1993	0	0	0	29	10	20	0	0	22	30	0	0	111
1994	0	0	0	17	3	3	0	0	4	30	0	0	57
1995	0	0	0	29	30	29	30	7	19	30	0	0	174
1996	0	0	0	8	9	30	6	5	30	31	0	0	119
1997	0	0	0	26	30	29	8	30	29	30	0	0	182
1998	0	0	0	29	30	18	7	30	29	30	0	0	173
1999	0	0	0	29	30	29	10	30	29	30	0	0	187
2000	0	0	0	30	11	2	1	0	20	31	0	0	95
2001	0	0	0	29	24	16	5	0	21	30	0	0	125
2002	0	0	0	16	2	0	0	0	0	0	0	0	18
2003	0	0	0	0	0	17	0	0	12	19	0	0	48
2004	0	0	0	0	0	0	0	0	0	6	0	0	6
2005	0	0	0	25	7	23	0	1	0	21	0	0	77
2006	0	0	0	9	0	0	0	0	0	0	0	0	9
Ave.	**0**	**0**	**0**	**20**	**16**	**17**	**9**	**9**	**16**	**22**	**0**	**0**	**109**

West Field

In Priority Flow Rate= 0.73 acre-ft./day

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1950	0.00	0.00	0.00	16.88	2.20	0.73	22.75	22.75	14.68	16.15	0.00	0.00	96.14
1951	0.00	0.00	0.00	22.02	4.40	0.00	13.94	9.54	19.08	22.75	0.00	0.00	91.74
1952	0.00	0.00	0.00	22.02	18.35	13.94	22.75	18.35	0.00	0.73	0.00	0.00	96.14
1953	0.00	0.00	0.00	22.02	7.34	2.94	14.68	2.94	14.68	0.00	0.00	0.00	64.58
1954	0.00	0.00	0.00	2.20	0.00	0.00	0.00	0.00	0.00	5.87	0.00	0.00	8.07
1955	0.00	0.00	0.00	8.07	8.81	0.00	0.00	8.07	22.02	5.87	0.00	0.00	52.84
1956	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.14	0.00	0.00	0.00	0.00	5.14
1957	0.00	0.00	0.00	22.02	22.75	22.02	22.75	22.75	22.02	22.75	0.00	0.00	157.05
1958	0.00	0.00	0.00	22.02	22.75	22.02	8.07	22.75	22.02	22.75	0.00	0.00	142.37
1959	0.00	0.00	0.00	22.02	22.75	8.81	2.94	0.00	0.73	22.75	0.00	0.00	79.99
1960	0.00	0.00	0.00	18.35	20.55	17.61	22.75	0.73	0.00	9.54	0.00	0.00	89.53
1961	0.00	0.00	0.00	21.28	13.94	18.35	19.08	21.28	9.54	22.75	0.00	0.00	126.23
1962	0.00	0.00	0.00	16.88	19.81	19.08	0.00	0.00	0.00	0.00	0.00	0.00	55.78
1963	0.00	0.00	0.00	0.00	0.00	11.01	0.00	0.00	8.07	16.15	0.00	0.00	35.23
1964	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1965	0.00	0.00	0.00	0.00	0.00	0.00	14.68	11.74	22.02	22.75	0.00	0.00	71.19
1966	0.00	0.00	0.00	22.02	22.75	22.02	1.47	0.00	16.15	8.07	0.00	0.00	92.47
1967	0.00	0.00	0.00	0.00	1.47	22.02	20.55	0.73	22.02	22.75	0.00	0.00	89.53
1968	0.00	0.00	0.00	22.02	10.27	10.27	0.00	0.00	0.00	11.74	0.00	0.00	54.31
1969	0.00	0.00	0.00	15.41	17.61	22.02	16.88	0.73	9.54	22.75	0.00	0.00	104.95
1970	0.00	0.00	0.00	22.02	21.28	22.02	3.67	0.00	11.74	22.75	0.00	0.00	103.48
1971	0.00	0.00	0.00	22.02	22.75	20.55	0.00	0.00	8.81	22.75	0.00	0.00	96.87
1972	0.00	0.00	0.00	14.68	5.87	10.27	0.00	0.00	21.28	22.75	0.00	0.00	74.86
1973	0.00	0.00	0.00	22.02	22.75	22.02	7.34	22.75	22.02	22.75	0.00	0.00	141.64
1974	0.00	0.00	0.00	21.28	5.14	16.15	2.20	14.68	19.81	22.02	0.00	0.00	101.28
1975	0.00	0.00	0.00	15.41	2.20	19.81	7.34	0.00	0.00	22.02	0.00	0.00	66.78
1976	0.00	0.00	0.00	10.27	11.01	5.14	0.00	0.00	4.40	0.00	0.00	0.00	30.82
1977	0.00	0.00	0.00	0.00	0.00	0.00	2.94	4.40	3.67	0.00	0.00	0.00	11.01
1978	0.00	0.00	0.00	0.00	3.67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.67
1979	0.00	0.00	0.00	0.73	21.28	21.28	16.88	22.02	21.28	22.02	0.00	0.00	125.49
1980	0.00	0.00	0.00	22.02	22.75	22.02	6.60	0.00	13.94	15.41	0.00	0.00	102.74
1981	0.00	0.00	0.00	0.00	0.00	0.00	2.20	0.00	16.15	22.02	0.00	0.00	40.36
1982	0.00	0.00	0.00	0.00	2.20	5.14	3.67	0.00	11.74	22.02	0.00	0.00	44.77
1983	0.00	0.00	0.00	21.28	22.02	21.28	22.02	22.02	21.28	22.02	0.00	0.00	151.91
1984	0.00	0.00	0.00	22.02	22.75	22.02	17.61	5.87	16.88	22.75	0.00	0.00	129.90
1985	0.00	0.00	0.00	21.28	22.02	21.28	8.81	5.14	16.88	22.02	0.00	0.00	117.42
1986	0.00	0.00	0.00	21.28	22.02	19.81	5.14	0.00	19.81	22.02	0.00	0.00	110.08

West Field

In Priority Flow Rate= 0.73 acre-ft./day

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1987	0.00	0.00	0.00	21.28	22.02	18.35	9.54	19.81	21.28	22.02	0.00	0.00	134.30
1988	0.00	0.00	0.00	22.02	19.81	15.41	3.67	0.00	16.88	22.75	0.00	0.00	100.54
1989	0.00	0.00	0.00	16.15	1.47	10.27	0.00	0.00	15.41	22.02	0.00	0.00	65.32
1990	0.00	0.00	0.00	21.28	22.02	16.88	0.73	16.88	10.27	22.02	0.00	0.00	110.08
1991	0.00	0.00	0.00	21.28	10.27	16.88	1.47	0.00	13.94	22.02	0.00	0.00	85.86
1992	0.00	0.00	0.00	20.55	0.00	11.74	0.00	5.14	22.02	22.75	0.00	0.00	82.20
1993	0.00	0.00	0.00	21.28	7.34	14.68	0.00	0.00	16.15	22.02	0.00	0.00	81.46
1994	0.00	0.00	0.00	12.48	2.20	2.20	0.00	0.00	2.94	22.02	0.00	0.00	41.83
1995	0.00	0.00	0.00	21.28	22.02	21.28	22.02	5.14	13.94	22.02	0.00	0.00	127.70
1996	0.00	0.00	0.00	5.87	6.60	22.02	4.40	3.67	22.02	22.75	0.00	0.00	87.33
1997	0.00	0.00	0.00	19.08	22.02	21.28	5.87	22.02	21.28	22.02	0.00	0.00	133.57
1998	0.00	0.00	0.00	21.28	22.02	13.21	5.14	22.02	21.28	22.02	0.00	0.00	126.96
1999	0.00	0.00	0.00	21.28	22.02	21.28	7.34	22.02	21.28	22.02	0.00	0.00	137.24
2000	0.00	0.00	0.00	22.02	8.07	1.47	0.73	0.00	14.68	22.75	0.00	0.00	69.72
2001	0.00	0.00	0.00	21.28	17.61	11.74	3.67	0.00	15.41	22.02	0.00	0.00	91.74
2002	0.00	0.00	0.00	11.74	1.47	0.00	0.00	0.00	0.00	0.00	0.00	0.00	13.21
2003	0.00	0.00	0.00	0.00	0.00	12.48	0.00	0.00	8.81	13.94	0.00	0.00	35.23
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.40	0.00	0.00	4.40
2005	0.00	0.00	0.00	18.35	5.14	16.88	0.00	0.73	0.00	15.41	0.00	0.00	56.51
2006	0.00	0.00	0.00	6.60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.60
Ave.	**0.00**	**0.00**	**0.00**	**14.68**	**11.54**	**12.45**	**6.57**	**6.35**	**12.10**	**16.29**	**0.00**	**0.00**	**79.97**

East Field

In Priority Flow Rate= 1.39 acre-ft./day

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1950	0.00	0.00	0.00	31.93	4.17	1.39	43.04	43.04	27.77	30.54	0.00	0.00	181.88
1951	0.00	0.00	0.00	41.65	8.33	0.00	26.38	18.05	36.10	43.04	0.00	0.00	173.55
1952	0.00	0.00	0.00	41.65	34.71	26.38	43.04	34.71	0.00	1.39	0.00	0.00	181.88
1953	0.00	0.00	0.00	41.65	13.88	5.55	27.77	5.55	27.77	0.00	0.00	0.00	122.18
1954	0.00	0.00	0.00	4.17	0.00	0.00	0.00	0.00	0.00	11.11	0.00	0.00	15.27
1955	0.00	0.00	0.00	15.27	16.66	0.00	0.00	15.27	41.65	11.11	0.00	0.00	99.96
1956	0.00	0.00	0.00	0.00	0.00	0.00	0.00	9.72	0.00	0.00	0.00	0.00	9.72
1957	0.00	0.00	0.00	41.65	43.04	41.65	43.04	43.04	41.65	43.04	0.00	0.00	297.12
1958	0.00	0.00	0.00	41.65	43.04	41.65	15.27	43.04	41.65	43.04	0.00	0.00	269.35
1959	0.00	0.00	0.00	41.65	43.04	16.66	5.55	0.00	1.39	43.04	0.00	0.00	151.34
1960	0.00	0.00	0.00	34.71	38.88	33.32	43.04	1.39	0.00	18.05	0.00	0.00	169.38
1961	0.00	0.00	0.00	40.26	26.38	34.71	36.10	40.26	18.05	43.04	0.00	0.00	238.80
1962	0.00	0.00	0.00	31.93	37.49	36.10	0.00	0.00	0.00	0.00	0.00	0.00	105.52
1963	0.00	0.00	0.00	0.00	0.00	20.83	0.00	0.00	15.27	30.54	0.00	0.00	66.64
1964	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1965	0.00	0.00	0.00	0.00	0.00	0.00	27.77	22.21	41.65	43.04	0.00	0.00	134.67
1966	0.00	0.00	0.00	41.65	43.04	41.65	2.78	0.00	30.54	15.27	0.00	0.00	174.94
1967	0.00	0.00	0.00	0.00	2.78	41.65	38.88	1.39	41.65	43.04	0.00	0.00	169.38
1968	0.00	0.00	0.00	41.65	19.44	19.44	0.00	0.00	0.00	22.21	0.00	0.00	102.74
1969	0.00	0.00	0.00	29.16	33.32	41.65	31.93	1.39	18.05	43.04	0.00	0.00	198.54
1970	0.00	0.00	0.00	41.65	40.26	41.65	6.94	0.00	22.21	43.04	0.00	0.00	195.76
1971	0.00	0.00	0.00	41.65	43.04	38.88	0.00	0.00	16.66	43.04	0.00	0.00	183.27
1972	0.00	0.00	0.00	27.77	11.11	19.44	0.00	0.00	40.26	43.04	0.00	0.00	141.62
1973	0.00	0.00	0.00	41.65	43.04	41.65	13.88	43.04	41.65	43.04	0.00	0.00	267.96
1974	0.00	0.00	0.00	40.26	9.72	30.54	4.17	27.77	37.49	41.65	0.00	0.00	191.60
1975	0.00	0.00	0.00	29.16	4.17	37.49	13.88	0.00	0.00	41.65	0.00	0.00	126.34
1976	0.00	0.00	0.00	19.44	20.83	9.72	0.00	0.00	8.33	0.00	0.00	0.00	58.31
1977	0.00	0.00	0.00	0.00	0.00	0.00	5.55	8.33	6.94	0.00	0.00	0.00	20.83
1978	0.00	0.00	0.00	0.00	6.94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.94
1979	0.00	0.00	0.00	1.39	40.26	40.26	31.93	41.65	40.26	41.65	0.00	0.00	237.42
1980	0.00	0.00	0.00	41.65	43.04	41.65	12.50	0.00	26.38	29.16	0.00	0.00	194.38
1981	0.00	0.00	0.00	0.00	0.00	0.00	4.17	0.00	30.54	41.65	0.00	0.00	76.36
1982	0.00	0.00	0.00	0.00	4.17	9.72	6.94	0.00	22.21	41.65	0.00	0.00	84.69
1983	0.00	0.00	0.00	40.26	41.65	40.26	41.65	41.65	40.26	41.65	0.00	0.00	287.40
1984	0.00	0.00	0.00	41.65	43.04	41.65	33.32	11.11	31.93	43.04	0.00	0.00	245.75
1985	0.00	0.00	0.00	40.26	41.65	40.26	16.66	9.72	31.93	41.65	0.00	0.00	222.14
1986	0.00	0.00	0.00	40.26	41.65	37.49	9.72	0.00	37.49	41.65	0.00	0.00	208.26

East Field

In Priority Flow Rate= 1.39 acre-ft./day

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1987	0.00	0.00	0.00	40.26	41.65	34.71	18.05	37.49	40.26	41.65	0.00	0.00	254.08
1988	0.00	0.00	0.00	41.65	37.49	29.16	6.94	0.00	31.93	43.04	0.00	0.00	190.21
1989	0.00	0.00	0.00	30.54	2.78	19.44	0.00	0.00	29.16	41.65	0.00	0.00	123.57
1990	0.00	0.00	0.00	40.26	41.65	31.93	1.39	31.93	19.44	41.65	0.00	0.00	208.26
1991	0.00	0.00	0.00	40.26	19.44	31.93	2.78	0.00	26.38	41.65	0.00	0.00	162.44
1992	0.00	0.00	0.00	38.88	0.00	22.21	0.00	9.72	41.65	43.04	0.00	0.00	155.50
1993	0.00	0.00	0.00	40.26	13.88	27.77	0.00	0.00	30.54	41.65	0.00	0.00	154.11
1994	0.00	0.00	0.00	23.60	4.17	4.17	0.00	0.00	5.55	41.65	0.00	0.00	79.14
1995	0.00	0.00	0.00	40.26	41.65	40.26	41.65	9.72	26.38	41.65	0.00	0.00	241.58
1996	0.00	0.00	0.00	11.11	12.50	41.65	8.33	6.94	41.65	43.04	0.00	0.00	165.22
1997	0.00	0.00	0.00	36.10	41.65	40.26	11.11	41.65	40.26	41.65	0.00	0.00	252.69
1998	0.00	0.00	0.00	40.26	41.65	24.99	9.72	41.65	40.26	41.65	0.00	0.00	240.19
1999	0.00	0.00	0.00	40.26	41.65	40.26	13.88	41.65	40.26	41.65	0.00	0.00	259.63
2000	0.00	0.00	0.00	41.65	15.27	2.78	1.39	0.00	27.77	43.04	0.00	0.00	131.90
2001	0.00	0.00	0.00	40.26	33.32	22.21	6.94	0.00	29.16	41.65	0.00	0.00	173.55
2002	0.00	0.00	0.00	22.21	2.78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	24.99
2003	0.00	0.00	0.00	0.00	0.00	23.60	0.00	0.00	16.66	26.38	0.00	0.00	66.64
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.33	0.00	0.00	8.33
2005	0.00	0.00	0.00	34.71	9.72	31.93	0.00	1.39	0.00	29.16	0.00	0.00	106.91
2006	0.00	0.00	0.00	12.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.50
Ave.	**0.00**	**0.00**	**0.00**	**27.77**	**21.82**	**23.55**	**12.42**	**12.01**	**22.90**	**30.81**	**0.00**	**0.00**	**151.29**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	16.88	10.13	6.75	0.10	0.05	0.05	0.05	0.00	1.32	0.00	10.07	0.05
May	2.20	1.32	0.88	1.85	1.28	0.58	0.58	0.00	1.32	0.00	0.74	0.58
Jun	0.73	0.44	0.29	3.33	0.54	2.78	0.44	2.34	0.00	1.32	0.00	1.76
Jul	22.75	13.65	9.10	3.68	0.58	3.10	3.10	0.00	1.32	0.00	9.23	3.10
Aug	22.75	13.65	9.10	3.18	0.24	2.94	2.94	0.00	1.32	0.00	10.71	2.94
Sep	14.68	8.81	5.87	2.06	0.62	1.44	1.44	0.00	1.32	0.00	7.36	1.44
Oct	16.15	9.69	6.46	1.36	0.09	1.27	1.27	0.00	1.32	0.00	8.42	1.27
Nov	0.00	0.00	0.00	0.02	0.01	0.02	0.00	0.02	1.30	0.02	0.00	0.02
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.00	0.00	0.00
Year Total	96.14	57.68	38.46	15.59	3.40	12.19	9.82	2.36	1.30	1.34	46.53	11.16
Jan-51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.30	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.00	0.00	0.00	0.00	0.00	1.30	0.00	13.21	0.00
May	4.40	2.64	1.76	2.08	0.86	1.23	1.23	0.00	1.30	0.00	1.41	1.23
Jun	0.00	0.00	0.00	2.64	0.79	1.85	0.00	1.85	0.00	1.30	0.00	1.30
Jul	13.94	8.36	5.58	4.19	0.84	3.35	3.35	0.00	1.32	0.00	3.69	3.35
Aug	9.54	5.72	3.82	3.38	2.50	0.88	0.88	0.00	1.32	0.00	4.84	0.88
Sep	19.08	11.45	7.63	2.02	0.36	1.66	1.66	0.00	1.32	0.00	9.78	1.66
Oct	22.75	13.65	9.10	0.66	0.51	0.15	0.15	0.00	1.32	0.00	13.50	0.15
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	91.73	55.04	36.69	14.98	5.85	9.13	7.27	1.85	1.32	1.30	46.43	8.57

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.43	0.17	0.26	0.26	0.00	1.32	0.00	12.96	0.26
May	18.35	11.01	7.34	2.25	1.26	0.99	0.99	0.00	1.32	0.00	10.02	0.99
Jun	13.94	8.36	5.58	3.88	1.00	2.88	2.88	0.00	1.32	0.00	5.49	2.88
Jul	22.75	13.65	9.10	4.08	0.31	3.77	3.77	0.00	1.32	0.00	9.88	3.77
Aug	18.35	11.01	7.34	3.59	0.41	3.18	3.18	0.00	1.32	0.00	7.83	3.18
Sep	0.00	0.00	0.00	2.35	0.00	2.35	0.00	2.35	0.00	1.32	0.00	1.32
Oct	0.73	0.44	0.29	0.83	0.03	0.80	0.44	0.36	0.00	0.00	0.00	0.44
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	96.14	57.68	38.46	17.42	3.19	14.23	11.52	2.71	0.00	1.32	46.18	12.84
Jan-53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.00	0.00	0.00	0.00	0.00	1.32	0.00	11.89	0.00
May	7.34	4.40	2.94	1.35	0.40	0.95	0.95	0.00	1.32	0.00	3.46	0.95
Jun	2.94	1.76	1.18	3.71	1.10	2.60	1.76	0.84	0.48	0.84	0.00	2.60
Jul	14.68	8.81	5.87	4.31	0.55	3.76	3.76	0.00	1.32	0.00	4.21	3.76
Aug	2.94	1.76	1.18	3.53	0.27	3.26	1.76	1.50	0.00	1.32	0.00	3.08
Sep	14.68	8.81	5.87	2.37	0.17	2.19	2.19	0.00	1.32	0.00	5.30	2.19
Oct	0.00	0.00	0.00	1.23	0.00	1.23	0.00	1.23	0.09	1.23	0.00	1.23
Nov	0.00	0.00	0.00	0.05	0.01	0.04	0.00	0.04	0.05	0.04	0.00	0.04
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Year Total	64.60	38.76	25.84	16.54	2.51	14.03	10.42	3.61	0.01	3.43	24.86	13.85

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00
Apr	2.20	1.32	0.88	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
May	0.00	0.00	0.00	2.17	0.41	1.77	0.00	1.77	0.00	1.32	0.00	1.32
Jun	0.00	0.00	0.00	3.66	0.38	3.29	0.00	3.29	0.00	0.00	0.00	0.00
Jul	0.00	0.00	0.00	4.78	0.44	4.34	0.00	4.34	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	3.70	0.52	3.17	0.00	3.17	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	2.41	0.38	2.03	0.00	2.03	0.00	0.00	0.00	0.00
Oct	5.87	3.52	2.35	1.16	0.11	1.05	1.05	0.00	1.32	0.00	1.15	1.05
Nov	0.00	0.00	0.00	0.08	0.02	0.06	0.00	0.06	1.26	0.06	0.00	0.06
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Year Total	8.07	4.84	3.23	17.97	2.25	15.71	1.05	14.66	1.26	1.38	1.15	2.43
Jan-55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Apr	8.07	4.84	3.23	0.18	0.01	0.17	0.17	0.00	1.32	0.00	4.61	0.17
May	8.81	5.29	3.52	2.47	0.62	1.85	1.85	0.00	1.32	0.00	3.43	1.85
Jun	0.00	0.00	0.00	3.03	0.97	2.06	0.00	2.06	0.00	0.00	0.00	0.00
Jul	0.00	0.00	0.00	4.54	0.56	3.98	0.00	3.98	0.00	0.00	0.00	0.00
Aug	8.07	4.84	3.23	3.89	0.61	3.29	3.29	0.00	1.32	0.00	0.24	3.29
Sep	22.02	13.21	8.81	2.26	0.70	1.56	1.56	0.00	1.32	0.00	11.65	1.56
Oct	5.87	3.52	2.35	1.10	0.03	1.07	1.07	0.00	1.32	0.00	2.46	1.07
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	52.84	31.70	21.14	17.47	3.49	13.98	7.94	6.04	1.32	0.00	22.39	7.94

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.56	0.21	0.34	0.00	0.34	0.98	0.34	0.00	0.34
May	0.00	0.00	0.00	2.53	0.95	1.58	0.00	1.58	0.00	0.98	0.00	0.98
Jun	0.00	0.00	0.00	4.01	0.11	3.89	0.00	3.89	0.00	0.00	0.00	0.00
Jul	0.00	0.00	0.00	4.12	0.93	3.19	0.00	3.19	0.00	0.00	0.00	0.00
Aug	5.14	3.08	2.06	3.35	0.76	2.59	2.59	0.00	0.50	0.00	0.00	2.59
Sep	0.00	0.00	0.00	2.41	0.00	2.41	0.00	2.41	0.00	0.50	0.00	0.50
Oct	0.00	0.00	0.00	1.16	0.00	1.16	0.00	1.16	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	5.14	3.08	2.06	18.13	2.97	15.16	2.59	12.57		1.82	0.00	4.41
Jan-57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.12	0.12	0.00	0.00	0.00	1.32	0.00	11.89	0.00
May	22.75	13.65	9.10	1.93	1.87	0.06	0.06	0.00	1.32	0.00	13.59	0.06
Jun	22.02	13.21	8.81	3.36	0.42	2.93	2.93	0.00	1.32	0.00	10.28	2.93
Jul	22.75	13.65	9.10	4.34	0.18	4.16	4.16	0.00	1.32	0.00	9.49	4.16
Aug	22.75	13.65	9.10	3.71	1.20	2.51	2.51	0.00	1.32	0.00	11.14	2.51
Sep	22.02	13.21	8.81	2.03	0.30	1.73	1.73	0.00	1.32	0.00	11.48	1.73
Oct	22.75	13.65	9.10	1.01	0.54	0.47	0.47	0.00	1.32	0.00	13.18	0.47
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	157.06	94.24	62.82	16.51	4.64	11.87	11.86	0.00	1.32	0.00	81.05	11.86

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.06	0.02	0.03	0.03	0.00	1.32	0.00	13.18	0.03
May	22.75	13.65	9.10	2.73	1.78	0.95	0.95	0.00	1.32	0.00	12.70	0.95
Jun	22.02	13.21	8.81	3.62	0.92	2.70	2.70	0.00	1.32	0.00	10.51	2.70
Jul	8.07	4.84	3.23	3.83	0.67	3.17	3.17	0.00	1.32	0.00	1.68	3.17
Aug	22.75	13.65	9.10	3.95	0.44	3.51	3.51	0.00	1.32	0.00	10.14	3.51
Sep	22.02	13.21	8.81	2.39	0.17	2.22	2.22	0.00	1.32	0.00	10.99	2.22
Oct	22.75	13.65	9.10	1.22	0.28	0.94	0.94	0.00	1.32	0.00	12.71	0.94
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	142.38	85.43	56.95	17.79	4.28	13.52	13.52	0.00	1.32	0.00	71.91	13.52
Jan-59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.40	0.27	0.13	0.13	0.00	1.32	0.00	13.08	0.13
May	22.75	13.65	9.10	2.16	1.20	0.96	0.96	0.00	1.32	0.00	12.69	0.96
Jun	8.81	5.29	3.52	3.75	0.15	3.60	3.60	0.00	1.32	0.00	1.69	3.60
Jul	2.94	1.76	1.18	4.25	0.12	4.14	1.76	2.38	0.00	1.32	0.00	3.08
Aug	0.00	0.00	0.00	3.90	0.26	3.65	0.00	3.65	0.00	0.00	0.00	0.00
Sep	0.73	0.44	0.29	2.00	0.70	1.30	0.44	0.86	0.00	0.00	0.00	0.44
Oct	22.75	13.65	9.10	0.62	0.48	0.14	0.14	0.00	1.32	0.00	12.19	0.14
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	80.00	48.00	32.00	17.08	3.17	13.91	7.03	6.89	1.32	1.32	39.65	8.35

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	18.35	11.01	7.34	0.00	0.00	0.00	0.00	0.00	1.32	0.00	11.01	0.00
May	20.55	12.33	8.22	2.24	0.89	1.35	1.35	0.00	1.32	0.00	10.98	1.35
Jun	17.61	10.57	7.04	3.63	0.30	3.33	3.33	0.00	1.32	0.00	7.24	3.33
Jul	22.75	13.65	9.10	4.24	0.36	3.88	3.88	0.00	1.32	0.00	9.77	3.88
Aug	0.73	0.44	0.29	3.71	0.00	3.71	0.44	3.27	0.00	0.00	0.00	0.44
Sep	0.00	0.00	0.00	2.40	0.14	2.26	0.00	2.26	0.00	0.00	0.00	0.00
Oct	9.54	5.72	3.82	1.08	0.63	0.45	0.45	0.00	1.32	0.00	3.95	0.45
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	89.53	53.72	35.81	17.30	2.32	14.98	9.45	5.53	1.32	0.00	42.95	9.45
Jan-61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	21.28	12.77	8.51	0.26	0.06	0.20	0.20	0.00	1.32	0.00	12.57	0.20
May	13.94	8.36	5.58	2.28	2.20	0.09	0.09	0.00	1.32	0.00	8.28	0.09
Jun	18.35	11.01	7.34	3.41	0.74	2.67	2.67	0.00	1.32	0.00	8.34	2.67
Jul	19.08	11.45	7.63	4.06	1.65	2.41	2.41	0.00	1.32	0.00	9.03	2.41
Aug	21.28	12.77	8.51	3.74	1.52	2.22	2.22	0.00	1.32	0.00	10.55	2.22
Sep	9.54	5.72	3.82	1.73	1.29	0.44	0.44	0.00	1.32	0.00	5.28	0.44
Oct	22.75	13.65	9.10	0.81	0.29	0.53	0.53	0.00	1.32	0.00	13.12	0.53
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	126.22	75.73	50.49	16.30	7.74	8.56	8.56	0.00	1.32	0.00	67.17	8.56

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	16.88	10.13	6.75	0.00	0.00	0.00	0.00	0.00	1.32	0.00	10.13	0.00
May	19.81	11.89	7.92	2.47	0.86	1.61	1.61	0.00	1.32	0.00	10.28	1.61
Jun	19.08	11.45	7.63	3.15	0.83	2.32	2.32	0.00	1.32	0.00	9.13	2.32
Jul	0.00	0.00	0.00	3.92	0.86	3.06	0.00	3.06	0.00	1.32	0.00	1.32
Aug	0.00	0.00	0.00	3.51	0.11	3.40	0.00	3.40	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	2.15	0.14	2.01	0.00	2.01	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	1.30	0.60	0.71	0.00	0.71	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.13	0.03	0.10	0.00	0.10	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	55.77	33.46	22.31	16.63	3.43	13.20	3.93	9.28	0.00	1.32	29.54	5.25
Jan-63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.46	0.05	0.42	0.00	0.42	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	2.56	0.15	2.41	0.00	2.41	0.00	0.00	0.00	0.00
Jun	11.01	6.61	4.40	3.61	1.42	2.19	2.19	0.00	1.32	0.00	3.10	2.19
Jul	0.00	0.00	0.00	4.60	0.01	4.58	0.00	4.58	0.00	1.32	0.00	1.32
Aug	0.00	0.00	0.00	3.62	0.70	2.92	0.00	2.92	0.00	0.00	0.00	0.00
Sep	8.07	4.84	3.23	2.54	0.78	1.76	1.76	0.00	1.32	0.00	1.76	1.76
Oct	16.15	9.69	6.46	1.45	0.09	1.36	1.36	0.00	1.32	0.00	8.33	1.36
Nov	0.00	0.00	0.00	0.13	0.01	0.12	0.00	0.12	1.20	0.12	0.00	0.12
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00
Year Total	35.23	21.14	14.09	18.96	3.20	15.76	5.31	10.45	1.20	1.44	13.19	6.75

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.28	0.10	0.18	0.00	0.18	1.02	0.18	0.00	0.18
May	0.00	0.00	0.00	2.49	0.70	1.79	0.00	1.79	0.00	1.02	0.00	1.02
Jun	0.00	0.00	0.00	3.23	0.22	3.01	0.00	3.01	0.00	0.00	0.00	0.00
Jul	0.00	0.00	0.00	4.66	0.48	4.18	0.00	4.18	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	3.38	0.18	3.20	0.00	3.20	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	2.14	0.11	2.03	0.00	2.03	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	1.09	0.00	1.09	0.00	1.09	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	0.00	0.00	0.00	17.27	1.78	15.49	0.00	15.48	0.00	1.20	0.00	1.20
Jan-65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	1.05	0.30	0.75	0.00	0.75	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	2.23	0.69	1.54	0.00	1.54	0.00	0.00	0.00	0.00
Jun	0.00	0.00	0.00	3.17	1.84	1.33	0.00	1.33	0.00	0.00	0.00	0.00
Jul	14.68	8.81	5.87	4.21	0.96	3.24	3.24	0.00	1.32	0.00	4.24	3.24
Aug	11.74	7.04	4.70	3.41	0.17	3.23	3.23	0.00	1.32	0.00	3.81	3.23
Sep	22.02	13.21	8.81	1.59	0.79	0.79	0.79	0.00	1.32	0.00	12.42	0.79
Oct	22.75	13.65	9.10	1.35	0.17	1.18	1.18	0.00	1.32	0.00	12.47	1.18
Nov	0.00	0.00	0.00	0.21	0.02	0.19	0.00	0.19	1.13	0.19	0.00	0.19
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00
Year Total	71.19	42.71	28.48	17.21	4.94	12.27	8.44	3.81	1.13	0.19	32.94	8.63

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.13	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.00	0.00	0.00	0.00	0.00	1.32	0.00	13.02	0.00
May	22.75	13.65	9.10	1.68	0.05	1.63	1.63	0.00	1.32	0.00	12.02	1.63
Jun	22.02	13.21	8.81	3.35	0.65	2.71	2.71	0.00	1.32	0.00	10.51	2.71
Jul	1.47	0.88	0.59	4.80	0.28	4.51	0.88	3.63	0.00	1.32	0.00	2.20
Aug	0.00	0.00	0.00	3.47	0.26	3.21	0.00	3.21	0.00	0.00	0.00	0.00
Sep	16.15	9.69	6.46	2.32	0.44	1.88	3.20	-1.32	1.32	0.00	6.49	3.20
Oct	8.07	4.84	3.23	1.00	0.12	0.88	0.88	0.00	1.32	0.00	3.96	0.88
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	92.48	55.49	36.99	16.62	1.80	14.82	9.30	5.52	1.32	1.32	46.00	10.62
Jan-67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.37	0.23	0.14	0.00	0.14	1.18	0.14	0.00	0.14
May	1.47	0.88	0.59	1.99	1.54	0.45	0.45	0.00	1.32	0.00	0.29	0.45
Jun	22.02	13.21	8.81	2.84	1.18	1.66	1.66	0.00	1.32	0.00	11.55	1.66
Jul	20.55	12.33	8.22	4.12	1.25	2.87	2.87	0.00	1.32	0.00	9.46	2.87
Aug	0.73	0.44	0.29	3.47	0.74	2.73	0.44	2.29	0.00	1.32	0.00	1.76
Sep	22.02	13.21	8.81	2.19	0.35	1.84	1.84	0.00	1.32	0.00	10.05	1.84
Oct	22.75	13.65	9.10	1.27	0.20	1.06	1.06	0.00	1.32	0.00	12.59	1.06
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	89.54	53.72	35.82	16.24	5.49	10.75	8.32	2.43	1.32	1.46	43.94	9.78

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.14	0.06	0.08	0.08	0.00	1.32	0.00	13.14	0.08
May	10.27	6.16	4.11	1.99	1.08	0.91	0.91	0.00	1.32	0.00	5.25	0.91
Jun	10.27	6.16	4.11	3.65	0.37	3.29	3.29	0.00	1.32	0.00	2.87	3.29
Jul	0.00	0.00	0.00	4.20	0.87	3.32	0.00	3.32	0.00	1.32	0.00	1.32
Aug	0.00	0.00	0.00	3.36	0.84	2.53	0.00	2.53	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	2.07	0.00	2.07	0.00	2.07	0.00	0.00	0.00	0.00
Oct	11.74	7.04	4.70	1.06	0.20	0.87	0.87	0.00	1.32	0.00	4.86	0.87
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	54.30	32.58	21.72	16.48	3.41	13.07	5.15	7.92	1.32	1.32	26.12	6.47
Jan-69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	15.41	9.25	6.16	0.20	0.05	0.14	0.14	0.00	1.32	0.00	9.10	0.14
May	17.61	10.57	7.04	2.48	1.31	1.17	1.17	0.00	1.32	0.00	9.40	1.17
Jun	22.02	13.21	8.81	2.82	0.95	1.87	1.87	0.00	1.32	0.00	11.35	1.87
Jul	16.88	10.13	6.75	4.46	0.38	4.08	4.08	0.00	1.32	0.00	6.05	4.08
Aug	0.73	0.44	0.29	3.95	0.73	3.22	0.44	2.78	0.00	1.32	0.00	1.76
Sep	9.54	5.72	3.82	2.37	0.24	2.13	2.13	0.00	1.32	0.00	2.27	2.13
Oct	22.75	13.65	9.10	0.32	0.32	0.00	0.00	0.00	1.32	0.00	13.65	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	104.94	62.96	41.98	16.59	3.98	12.60	9.83	2.78	1.32	1.32	51.82	11.15

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.49	0.13	0.36	0.36	0.00	1.32	0.00	12.85	0.36
May	21.28	12.77	8.51	2.50	1.07	1.43	1.43	0.00	1.32	0.00	11.34	1.43
Jun	22.02	13.21	8.81	3.34	0.95	2.39	2.39	0.00	1.32	0.00	10.82	2.39
Jul	3.67	2.20	1.47	4.28	1.10	3.17	2.20	0.97	0.35	0.97	0.00	3.17
Aug	0.00	0.00	0.00	3.94	0.42	3.52	0.00	3.52	0.00	0.35	0.00	0.35
Sep	11.74	7.04	4.70	2.02	0.59	1.44	1.44	0.00	1.32	0.00	4.29	1.44
Oct	22.75	13.65	9.10	0.58	0.22	0.36	0.36	0.00	1.32	0.00	13.29	0.36
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	103.48	62.09	41.39	17.15	4.48	12.67	8.18	4.49	1.32	1.32	52.59	9.50
Jan-71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.99	0.99	0.00	0.00	0.00	1.32	0.00	13.21	0.00
May	22.75	13.65	9.10	2.13	0.83	1.30	1.30	0.00	1.32	0.00	12.35	1.30
Jun	20.55	12.33	8.22	3.73	0.05	3.68	3.68	0.00	1.32	0.00	8.65	3.68
Jul	0.00	0.00	0.00	3.98	0.22	3.76	0.00	3.76	0.00	1.32	0.00	1.32
Aug	0.00	0.00	0.00	3.80	0.05	3.75	0.00	3.75	0.00	0.00	0.00	0.00
Sep	8.81	5.29	3.52	1.83	1.17	0.66	0.66	0.00	1.32	0.00	3.31	0.66
Oct	22.75	13.65	9.10	0.88	0.25	0.63	0.63	0.00	1.32	0.00	13.02	0.63
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	96.88	58.13	38.75	17.33	3.56	13.77	6.27	7.51	1.32	1.32	50.54	7.59

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	14.68	8.81	5.87	0.00	0.00	0.00	0.00	0.00	1.32	0.00	8.81	0.00
May	5.87	3.52	2.35	2.35	0.20	2.15	2.15	0.00	1.32	0.00	1.37	2.15
Jun	10.27	6.16	4.11	3.72	0.59	3.13	3.13	0.00	1.32	0.00	3.03	3.13
Jul	0.00	0.00	0.00	3.90	0.31	3.59	0.00	3.59	0.00	1.32	0.00	1.32
Aug	0.00	0.00	0.00	3.55	0.90	2.65	0.00	2.65	0.00	0.00	0.00	0.00
Sep	21.28	12.77	8.51	2.18	0.19	1.99	1.99	0.00	1.32	0.00	9.45	1.99
Oct	22.75	13.65	9.10	0.89	0.14	0.75	0.75	0.00	1.32	0.00	12.90	0.75
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	74.85	44.91	29.94	16.58	2.32	14.26	8.02	6.24	1.32	1.32	35.56	9.34
Jan-73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.85	0.33	0.52	0.52	0.00	1.32	0.00	12.69	0.52
May	22.75	13.65	9.10	2.27	0.60	1.66	1.66	0.00	1.32	0.00	11.99	1.66
Jun	22.02	13.21	8.81	3.61	0.13	3.48	3.48	0.00	1.32	0.00	9.73	3.48
Jul	7.34	4.40	2.94	3.96	1.04	2.91	2.91	0.00	1.32	0.00	1.49	2.91
Aug	22.75	13.65	9.10	3.90	0.04	3.85	3.85	0.00	1.32	0.00	9.80	3.85
Sep	22.02	13.21	8.81	2.05	0.62	1.44	1.44	0.00	1.32	0.00	11.78	1.44
Oct	22.75	13.65	9.10	1.18	0.13	1.05	1.05	0.00	1.32	0.00	12.60	1.05
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	141.65	84.99	56.66	17.81	2.89	14.93	14.91	0.00	1.32	0.00	70.08	14.91

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	21.28	12.77	8.51	0.78	0.29	0.50	0.50	0.00	1.32	0.00	12.27	0.50
May	5.14	3.08	2.06	2.76	0.00	2.76	2.76	0.00	1.32	0.00	0.33	2.76
Jun	16.15	9.69	6.46	3.57	1.17	2.40	2.40	0.00	1.32	0.00	7.29	2.40
Jul	2.20	1.32	0.88	4.44	0.73	3.71	1.32	2.39	0.00	1.32	0.00	2.64
Aug	14.68	8.81	5.87	3.31	0.01	3.31	3.31	0.00	1.32	0.00	4.18	3.31
Sep	19.81	11.89	7.92	2.01	0.40	1.61	1.61	0.00	1.32	0.00	10.28	1.61
Oct	22.02	13.21	8.81	1.23	0.65	0.58	0.58	0.00	1.32	0.00	12.64	0.58
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	101.28	60.77	40.51	18.10	3.24	14.86	12.48	2.39	1.32	1.32	46.99	13.80
Jan-75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	15.41	9.25	6.16	0.47	0.19	0.28	0.28	0.00	1.32	0.00	8.97	0.28
May	2.20	1.32	0.88	2.02	1.47	0.55	0.55	0.00	1.32	0.00	0.77	0.55
Jun	19.81	11.89	7.92	3.20	0.70	2.50	2.50	0.00	1.32	0.00	9.39	2.50
Jul	7.34	4.40	2.94	4.34	0.41	3.93	3.93	0.00	1.32	0.00	0.48	3.93
Aug	0.00	0.00	0.00	3.64	1.12	2.52	0.00	2.52	0.00	1.32	0.00	1.32
Sep	0.00	0.00	0.00	2.11	0.13	1.98	0.00	1.98	0.00	0.00	0.00	0.00
Oct	22.02	13.21	8.81	1.15	0.28	0.87	0.87	0.00	1.32	0.00	11.03	0.87
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	66.78	40.07	26.71	16.94	4.32	12.62	8.13	4.50	1.32	1.32	30.64	9.45

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	10.27	6.16	4.11	1.21	0.47	0.74	0.74	0.00	1.32	0.00	5.42	0.74
May	11.01	6.61	4.40	2.31	0.43	1.88	1.88	0.00	1.32	0.00	4.73	1.88
Jun	5.14	3.08	2.06	3.37	0.39	2.97	2.97	0.00	1.32	0.00	0.11	2.97
Jul	0.00	0.00	0.00	4.46	0.47	4.00	0.00	4.00	0.00	1.32	0.00	1.32
Aug	0.00	0.00	0.00	3.54	0.76	2.78	0.00	2.78	0.00	0.00	0.00	0.00
Sep	4.40	2.64	1.76	2.21	0.71	1.51	1.51	0.00	1.13	0.00	0.00	1.51
Oct	0.00	0.00	0.00	0.75	0.04	0.70	0.00	0.70	0.43	0.70	0.00	0.70
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00
Year Total	30.82	18.49	12.33	17.85	3.28	14.58	7.10	7.48		2.02	10.26	9.12
Jan-77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.43	0.00	0.00	0.00
Apr	0.00	0.00	0.00	1.37	0.80	0.56	0.00	0.56	0.00	0.43	0.00	0.43
May	0.00	0.00	0.00	2.67	0.43	2.24	0.00	2.24	0.00	0.00	0.00	0.00
Jun	0.00	0.00	0.00	4.20	0.12	4.08	0.00	4.08	0.00	0.00	0.00	0.00
Jul	2.94	1.76	1.18	4.52	2.25	2.27	1.76	0.51	0.00	0.00	0.00	1.76
Aug	4.40	2.64	1.76	3.51	0.50	3.01	2.64	0.37	0.00	0.00	0.00	2.64
Sep	3.67	2.20	1.47	2.59	0.02	2.58	2.20	0.38	0.00	0.00	0.00	2.20
Oct	0.00	0.00	0.00	1.26	0.01	1.25	0.00	1.25	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.02	0.00	0.02	0.00	0.02	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	11.01	6.61	4.40	20.15	4.14	16.01	6.60	9.41		0.43	0.00	7.03

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	3.67	2.20	1.47	1.68	1.45	0.23	0.23	0.00	1.32	0.00	0.65	0.23
Jun	0.00	0.00	0.00	3.56	0.58	2.98	0.00	2.98	0.00	1.32	0.00	1.32
Jul	0.00	0.00	0.00	4.45	0.46	3.99	0.00	3.99	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	3.50	0.33	3.17	0.00	3.17	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	2.46	0.01	2.46	0.00	2.46	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	1.07	0.55	0.52	0.00	0.52	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	3.67	2.20	1.47	16.73	3.37	13.36	0.23	13.12	0.00	1.32	0.65	1.55
Jan-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.73	0.44	0.29	0.00	0.00	0.00	0.00	0.00	0.44	0.00	0.00	0.00
May	21.28	12.77	8.51	1.61	1.18	0.43	0.43	0.00	1.32	0.00	12.33	0.43
Jun	21.28	12.77	8.51	3.36	1.19	2.18	2.18	0.00	1.32	0.00	10.59	2.18
Jul	16.88	10.13	6.75	4.37	0.43	3.95	3.95	0.00	1.32	0.00	6.18	3.95
Aug	22.02	13.21	8.81	3.39	1.19	2.20	2.20	0.00	1.32	0.00	11.01	2.20
Sep	21.28	12.77	8.51	2.52	0.40	2.12	2.12	0.00	1.32	0.00	10.65	2.12
Oct	22.02	13.21	8.81	1.19	0.26	0.93	0.93	0.00	1.32	0.00	12.28	0.93
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	125.49	75.29	50.20	16.44	4.64	11.80	11.81	0.00	1.32	0.00	63.04	11.81

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.68	0.44	0.23	0.23	0.00	1.32	0.00	12.98	0.23
May	22.75	13.65	9.10	2.13	1.19	0.93	0.93	0.00	1.32	0.00	12.72	0.93
Jun	22.02	13.21	8.81	3.92	0.00	3.92	3.92	0.00	1.32	0.00	9.29	3.92
Jul	6.60	3.96	2.64	4.62	0.53	4.09	3.96	0.13	1.19	0.13	0.00	4.09
Aug	0.00	0.00	0.00	3.65	0.26	3.39	0.00	3.39	0.00	1.19	0.00	1.19
Sep	13.94	8.36	5.58	2.40	0.27	2.14	2.14	0.00	1.32	0.00	4.91	2.14
Oct	15.41	9.25	6.16	0.98	0.19	0.79	0.79	0.00	1.32	0.00	8.46	0.79
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	102.74	61.64	41.10	18.38	2.88	15.50	11.97	3.52	1.32	1.32	48.36	13.29
Jan-81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	0.00	0.00	0.00	1.51	0.34	1.17	0.00	1.17	0.15	1.17	0.00	1.17
May	0.00	0.00	0.00	2.16	1.40	0.76	0.00	0.76	0.00	0.15	0.00	0.15
Jun	0.00	0.00	0.00	3.85	0.14	3.71	0.00	3.71	0.00	0.00	0.00	0.00
Jul	2.20	1.32	0.88	4.40	0.86	3.54	1.32	2.22	0.00	0.00	0.00	1.32
Aug	0.00	0.00	0.00	3.57	0.62	2.94	0.00	2.94	0.00	0.00	0.00	0.00
Sep	16.15	9.69	6.46	2.60	0.47	2.12	2.12	0.00	1.32	0.00	6.25	2.12
Oct	22.02	13.21	8.81	1.11	0.26	0.85	0.85	0.00	1.32	0.00	12.36	0.85
Nov	0.00	0.00	0.00	0.13	0.00	0.13	0.00	0.13	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	40.37	24.22	16.15	19.32	4.09	15.23	4.29	10.93	1.32	1.32	18.61	5.61

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
May	2.20	1.32	0.88	1.92	1.37	0.55	0.55	0.00	1.32	0.00	0.77	0.55
Jun	5.14	3.08	2.06	3.00	1.52	1.48	1.48	0.00	1.32	0.00	1.60	1.48
Jul	3.67	2.20	1.47	4.25	1.87	2.37	2.20	0.17	1.15	0.17	0.00	2.37
Aug	0.00	0.00	0.00	3.97	0.18	3.78	0.00	3.78	0.00	1.15	0.00	1.15
Sep	11.74	7.04	4.70	2.13	1.19	0.94	0.94	0.00	1.32	0.00	4.78	0.94
Oct	22.02	13.21	8.81	0.85	0.18	0.67	0.67	0.00	1.32	0.00	12.54	0.67
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	44.77	26.86	17.91	16.11	6.31	9.80	5.84	3.95	1.32	1.32	19.69	7.16
Jan-83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	21.28	12.77	8.51	0.21	0.21	0.00	0.00	0.00	1.32	0.00	12.77	0.00
May	22.02	13.21	8.81	1.95	1.08	0.86	0.86	0.00	1.32	0.00	12.35	0.86
Jun	21.28	12.77	8.51	3.08	1.29	1.79	1.79	0.00	1.32	0.00	10.98	1.79
Jul	22.02	13.21	8.81	4.37	0.69	3.68	3.68	0.00	1.32	0.00	9.54	3.68
Aug	22.02	13.21	8.81	4.23	0.45	3.78	3.78	0.00	1.32	0.00	9.43	3.78
Sep	21.28	12.77	8.51	2.41	0.09	2.32	2.32	0.00	1.32	0.00	10.44	2.32
Oct	22.02	13.21	8.81	1.17	0.03	1.14	1.14	0.00	1.32	0.00	12.07	1.14
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	151.92	91.15	60.77	17.41	3.83	13.57	13.57	0.00	1.32	0.00	77.58	13.57

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.16	0.11	0.05	0.05	0.00	1.32	0.00	13.16	0.05
May	22.75	13.65	9.10	2.60	0.69	1.91	1.91	0.00	1.32	0.00	11.74	1.91
Jun	22.02	13.21	8.81	3.30	0.87	2.42	2.42	0.00	1.32	0.00	10.79	2.42
Jul	17.61	10.57	7.04	4.46	0.85	3.60	3.60	0.00	1.32	0.00	6.96	3.60
Aug	5.87	3.52	2.35	3.85	0.24	3.61	3.52	0.09	1.23	0.09	0.00	3.61
Sep	16.88	10.13	6.75	2.14	0.30	1.84	1.84	0.00	1.32	0.00	8.20	1.84
Oct	22.75	13.65	9.10	0.04	0.03	0.02	0.02	0.00	1.32	0.00	13.63	0.02
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	129.90	77.94	51.96	16.55	3.10	13.45	13.36	0.09	1.32	0.09	64.48	13.45
Jan-85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	21.28	12.77	8.51	1.31	0.56	0.75	0.75	0.00	1.32	0.00	12.01	0.75
May	22.02	13.21	8.81	2.67	0.38	2.29	2.29	0.00	1.32	0.00	10.92	2.29
Jun	21.28	12.77	8.51	3.52	1.08	2.44	2.44	0.00	1.32	0.00	10.33	2.44
Jul	8.81	5.29	3.52	4.29	1.49	2.81	2.81	0.00	1.32	0.00	2.48	2.81
Aug	5.14	3.08	2.06	3.69	0.07	3.61	3.08	0.53	0.79	0.53	0.00	3.61
Sep	16.88	10.13	6.75	1.97	0.50	1.47	1.47	0.00	1.32	0.00	8.13	1.47
Oct	22.02	13.21	8.81	0.79	0.26	0.53	0.53	0.00	1.32	0.00	12.69	0.53
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	117.43	70.46	46.97	18.24	4.34	13.89	13.37	0.53	1.32	0.53	56.56	13.90

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	21.28	12.77	8.51	0.85	0.37	0.48	0.48	0.00	1.32	0.00	12.29	0.48
May	22.02	13.21	8.81	2.32	0.54	1.77	1.77	0.00	1.32	0.00	11.44	1.77
Jun	19.81	11.89	7.92	3.81	0.51	3.31	3.31	0.00	1.32	0.00	8.58	3.31
Jul	5.14	3.08	2.06	4.26	0.42	3.84	3.08	0.76	0.57	0.76	0.00	3.84
Aug	0.00	0.00	0.00	3.66	0.51	3.14	0.00	3.14	0.00	0.57	0.00	0.57
Sep	19.81	11.89	7.92	2.07	0.28	1.79	1.79	0.00	1.32	0.00	8.77	1.79
Oct	22.02	13.21	8.81	0.93	0.43	0.50	0.50	0.00	1.32	0.00	12.71	0.50
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	110.08	66.05	44.03	17.90	3.06	14.84	10.93	3.90	1.32	1.33	53.79	12.26
Jan-87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	21.28	12.77	8.51	0.98	0.13	0.84	0.84	0.00	1.32	0.00	11.92	0.84
May	22.02	13.21	8.81	2.53	1.12	1.41	1.41	0.00	1.32	0.00	11.80	1.41
Jun	18.35	11.01	7.34	3.65	0.84	2.81	2.81	0.00	1.32	0.00	8.20	2.81
Jul	9.54	5.72	3.82	4.35	0.36	3.99	3.99	0.00	1.32	0.00	1.73	3.99
Aug	19.81	11.89	7.92	3.52	0.32	3.20	3.20	0.00	1.32	0.00	8.69	3.20
Sep	21.28	12.77	8.51	2.20	0.24	1.96	1.96	0.00	1.32	0.00	10.81	1.96
Oct	22.02	13.21	8.81	1.12	0.16	0.96	0.96	0.00	1.32	0.00	12.25	0.96
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	134.30	80.58	53.72	18.34	3.17	15.18	15.17	0.00	1.32	0.00	65.40	15.17

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.48	0.10	0.38	0.38	0.00	1.32	0.00	12.83	0.38
May	19.81	11.89	7.92	2.54	0.96	1.58	1.58	0.00	1.32	0.00	10.31	1.58
Jun	15.41	9.25	6.16	4.06	0.64	3.42	3.42	0.00	1.32	0.00	5.83	3.42
Jul	3.67	2.20	1.47	4.34	0.51	3.83	2.20	1.63	0.00	1.32	0.00	3.52
Aug	0.00	0.00	0.00	3.85	0.83	3.02	0.00	3.02	0.00	0.00	0.00	0.00
Sep	16.88	10.13	6.75	2.18	0.71	1.47	1.47	0.00	1.32	0.00	7.33	1.47
Oct	22.75	13.65	9.10	1.35	0.01	1.34	1.34	0.00	1.32	0.00	12.31	1.34
Nov	0.00	0.00	0.00	0.10	0.00	0.09	0.00	0.09	1.23	0.09	0.00	0.09
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.00
Year Total	100.54	60.32	40.22	18.90	3.77	15.13	10.39	4.74		1.41	48.61	11.80
Jan-89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.23	0.00	0.00	0.00
Apr	16.15	9.69	6.46	1.02	0.29	0.72	0.72	0.00	1.23	0.00	8.97	0.72
May	1.47	0.88	0.59	2.53	0.91	1.61	0.88	0.73	0.50	0.73	0.00	1.61
Jun	10.27	6.16	4.11	3.26	0.70	2.56	2.56	0.00	1.32	0.00	2.28	2.56
Jul	0.00	0.00	0.00	4.51	0.42	4.09	0.00	4.09	0.00	1.32	0.00	1.32
Aug	0.00	0.00	0.00	3.54	0.49	3.06	0.00	3.06	0.00	0.00	0.00	0.00
Sep	15.41	9.25	6.16	2.19	0.83	1.36	1.36	0.00	1.32	0.00	6.57	1.36
Oct	22.02	13.21	8.81	1.16	0.25	0.91	0.91	0.00	1.32	0.00	12.30	0.91
Nov	0.00	0.00	0.00	0.05	0.00	0.05	0.00	0.05	1.27	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Year Total	65.32	39.19	26.13	18.26	3.90	14.36	6.43	7.93	1.27	2.05	30.12	8.48

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Apr	21.28	12.77	8.51	1.16	0.29	0.87	0.87	0.00	1.27	0.00	11.89	0.87
May	22.02	13.21	8.81	2.20	0.99	1.21	1.21	0.00	1.27	0.00	12.00	1.21
Jun	16.88	10.13	6.75	3.96	0.23	3.73	3.73	0.00	1.27	0.00	6.40	3.73
Jul	0.73	0.44	0.29	3.99	0.60	3.39	0.44	2.95	0.00	1.27	0.00	1.71
Aug	16.88	10.13	6.75	3.62	0.70	2.92	2.92	0.00	1.32	0.00	5.89	2.92
Sep	10.27	6.16	4.11	2.62	0.52	2.09	2.09	0.00	1.32	0.00	4.07	2.09
Oct	22.02	13.21	8.81	1.15	0.19	0.96	0.96	0.00	1.32	0.00	12.25	0.96
Nov	0.00	0.00	0.00	0.08	0.03	0.05	0.00	0.05	1.27	0.05	0.00	0.05
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Year Total	110.08	66.05	44.03	18.77	3.55	15.22	12.22	3.00	1.27	1.32	52.50	13.54
Jan-91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Apr	21.28	12.77	8.51	0.92	0.24	0.69	0.69	0.00	1.27	0.00	12.08	0.69
May	10.27	6.16	4.11	2.55	0.86	1.69	1.69	0.00	1.27	0.00	4.47	1.69
Jun	16.88	10.13	6.75	3.53	1.36	2.17	2.17	0.00	1.27	0.00	7.96	2.17
Jul	1.47	0.88	0.59	4.19	0.59	3.60	0.88	2.72	0.00	1.27	0.00	2.15
Aug	0.00	0.00	0.00	3.70	0.90	2.80	0.00	2.80	0.00	0.00	0.00	0.00
Sep	13.94	8.36	5.58	2.25	0.32	1.93	1.93	0.00	1.32	0.00	5.12	1.93
Oct	22.02	13.21	8.81	1.01	0.19	0.82	0.82	0.00	1.32	0.00	12.40	0.82
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	85.86	51.52	34.34	18.14	4.45	13.69	8.18	5.52	1.32	1.27	42.03	9.45

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	20.55	12.33	8.22	1.73	0.44	1.28	1.28	0.00	1.32	0.00	11.05	1.28
May	0.00	0.00	0.00	2.59	0.61	1.99	0.00	1.99	0.00	1.32	0.00	1.32
Jun	11.74	7.04	4.70	3.28	2.01	1.27	1.27	0.00	1.32	0.00	4.45	1.27
Jul	0.00	0.00	0.00	3.82	0.81	3.01	0.00	3.01	0.00	1.32	0.00	1.32
Aug	5.14	3.08	2.06	3.24	1.01	2.23	2.23	0.00	0.86	0.00	0.00	2.23
Sep	22.02	13.21	8.81	2.42	0.00	2.42	2.42	0.00	1.32	0.00	10.33	2.42
Oct	22.75	13.65	9.10	1.17	0.05	1.12	1.12	0.00	1.32	0.00	12.53	1.12
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	82.20	49.32	32.88	18.25	4.93	13.32	8.32	5.00	1.32	2.64	38.36	10.96
Jan-93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	21.28	12.77	8.51	0.59	0.27	0.32	0.32	0.00	1.32	0.00	12.45	0.32
May	7.34	4.40	2.94	2.51	0.48	2.02	2.02	0.00	1.32	0.00	2.38	2.02
Jun	14.68	8.81	5.87	3.27	0.91	2.36	2.36	0.00	1.32	0.00	6.44	2.36
Jul	0.00	0.00	0.00	4.07	0.59	3.48	0.00	3.48	0.00	1.32	0.00	1.32
Aug	0.00	0.00	0.00	3.41	0.47	2.94	0.00	2.94	0.00	0.00	0.00	0.00
Sep	16.15	9.69	6.46	2.01	0.91	1.10	1.10	0.00	1.32	0.00	7.27	1.10
Oct	22.02	13.21	8.81	0.76	0.50	0.26	0.26	0.00	1.32	0.00	12.95	0.26
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	81.47	48.88	32.59	16.62	4.13	12.48	6.06	6.42	1.32	1.32	41.49	7.38

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	12.48	7.49	4.99	0.19	0.06	0.13	0.13	0.00	1.32	0.00	7.36	0.13
May	2.20	1.32	0.88	2.81	0.40	2.41	1.32	1.09	0.23	1.09	0.00	2.41
Jun	2.20	1.32	0.88	4.01	0.77	3.24	1.32	1.92	0.00	0.23	0.00	1.55
Jul	0.00	0.00	0.00	4.18	1.04	3.14	0.00	3.14	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	3.78	0.79	2.99	0.00	2.99	0.00	0.00	0.00	0.00
Sep	2.94	1.76	1.18	2.47	0.18	2.29	1.76	0.53	0.00	0.00	0.00	1.76
Oct	22.02	13.21	8.81	1.06	0.48	0.58	0.58	0.00	1.32	0.00	11.31	0.58
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	41.84	25.10	16.74	18.51	3.74	14.77	5.11	9.67	1.32	1.32	18.67	6.43
Jan-95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	21.28	12.77	8.51	0.18	0.11	0.07	0.07	0.00	1.32	0.00	12.70	0.07
May	22.02	13.21	8.81	1.79	1.79	0.00	0.00	0.00	1.32	0.00	13.21	0.00
Jun	21.28	12.77	8.51	3.12	1.31	1.81	1.81	0.00	1.32	0.00	10.96	1.81
Jul	22.02	13.21	8.81	4.15	0.40	3.76	3.76	0.00	1.32	0.00	9.46	3.76
Aug	5.14	3.08	2.06	4.15	0.15	4.00	3.08	0.92	0.40	0.92	0.00	4.00
Sep	13.94	8.36	5.58	2.18	1.00	1.18	1.18	0.00	1.32	0.00	6.26	1.18
Oct	22.02	13.21	8.81	1.12	0.07	1.05	1.05	0.00	1.32	0.00	12.16	1.05
Nov	0.00	0.00	0.00	0.08	0.02	0.06	0.00	0.06	1.26	0.06	0.00	0.06
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Year Total	127.70	76.62	51.08	16.78	4.86	11.93	10.95	0.98	1.26	0.98	64.75	11.93

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Apr	5.87	3.52	2.35	0.13	0.03	0.10	0.10	0.00	1.32	0.00	3.36	0.10
May	6.60	3.96	2.64	2.48	1.44	1.04	1.04	0.00	1.32	0.00	2.92	1.04
Jun	22.02	13.21	8.81	3.64	0.85	2.79	2.79	0.00	1.32	0.00	10.42	2.79
Jul	4.40	2.64	1.76	4.33	0.64	3.69	2.64	1.05	0.27	1.05	0.00	3.69
Aug	3.67	2.20	1.47	3.62	0.21	3.41	2.20	1.21	0.00	0.27	0.00	2.47
Sep	22.02	13.21	8.81	2.15	0.50	1.66	1.66	0.00	1.32	0.00	10.24	1.66
Oct	22.75	13.65	9.10	1.12	0.15	0.97	0.97	0.00	1.32	0.00	12.68	0.97
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	87.33	52.40	34.93	17.47	3.82	13.65	11.40	2.26	1.32	1.32	39.62	12.72
Jan-97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	19.08	11.45	7.63	0.55	0.39	0.16	0.16	0.00	1.32	0.00	11.29	0.16
May	22.02	13.21	8.81	2.47	0.51	1.96	1.96	0.00	1.32	0.00	11.25	1.96
Jun	21.28	12.77	8.51	3.64	1.16	2.48	2.48	0.00	1.32	0.00	10.28	2.48
Jul	5.87	3.52	2.35	4.30	2.48	1.82	1.82	0.00	1.32	0.00	1.70	1.82
Aug	22.02	13.21	8.81	3.61	1.86	1.76	1.76	0.00	1.32	0.00	11.46	1.76
Sep	21.28	12.77	8.51	2.46	0.76	1.70	1.70	0.00	1.32	0.00	11.07	1.70
Oct	22.02	13.21	8.81	1.10	0.50	0.59	0.59	0.00	1.32	0.00	12.62	0.59
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	133.57	80.14	53.43	18.14	7.66	10.48	10.47	0.00	1.32	0.00	69.67	10.47

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	21.28	12.77	8.51	0.75	0.33	0.43	0.43	0.00	1.32	0.00	12.34	0.43
May	22.02	13.21	8.81	2.67	0.71	1.97	1.97	0.00	1.32	0.00	11.25	1.97
Jun	13.21	7.93	5.28	3.13	0.53	2.59	2.59	0.00	1.32	0.00	5.33	2.59
Jul	5.14	3.08	2.06	4.54	1.02	3.51	3.08	0.43	0.89	0.43	0.00	3.51
Aug	22.02	13.21	8.81	3.88	0.24	3.64	3.64	0.00	1.32	0.00	9.14	3.64
Sep	21.28	12.77	8.51	2.78	0.31	2.47	2.47	0.00	1.32	0.00	10.30	2.47
Oct	22.02	13.21	8.81	1.15	0.93	0.22	0.22	0.00	1.32	0.00	12.99	0.22
Nov	0.00	0.00	0.00	0.10	0.05	0.06	0.00	0.06	1.26	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Year Total	126.97	76.18	50.79	19.00	4.11	14.89	14.40	0.49	1.26	0.43	61.35	14.83
Jan-99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Apr	21.28	12.77	8.51	0.66	0.66	0.00	0.00	0.00	1.32	0.00	12.71	0.00
May	22.02	13.21	8.81	2.30	0.70	1.60	1.60	0.00	1.32	0.00	11.61	1.60
Jun	21.28	12.77	8.51	3.35	0.95	2.39	2.39	0.00	1.32	0.00	10.38	2.39
Jul	7.34	4.40	2.94	4.58	0.47	4.11	4.11	0.00	1.32	0.00	0.29	4.11
Aug	22.02	13.21	8.81	3.78	0.88	2.91	2.91	0.00	1.32	0.00	10.30	2.91
Sep	21.28	12.77	8.51	2.03	0.86	1.17	1.17	0.00	1.32	0.00	11.60	1.17
Oct	22.02	13.21	8.81	1.15	0.25	0.90	0.90	0.00	1.32	0.00	12.31	0.90
Nov	0.00	0.00	0.00	0.28	0.07	0.21	0.00	0.21	1.11	0.21	0.00	0.21
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.00	0.00
Year Total	137.24	82.34	54.90	18.12	4.83	13.29	13.08	0.21	1.11	0.21	69.20	13.29

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.00	0.00
Apr	22.02	13.21	8.81	0.96	0.13	0.83	0.83	0.00	1.32	0.00	12.38	0.83
May	8.07	4.84	3.23	2.87	0.48	2.40	2.40	0.00	1.32	0.00	2.44	2.40
Jun	1.47	0.88	0.59	3.55	0.45	3.10	0.88	2.22	0.00	1.32	0.00	2.20
Jul	0.73	0.44	0.29	4.76	0.29	4.46	0.44	4.02	0.00	0.00	0.00	0.44
Aug	0.00	0.00	0.00	4.06	0.63	3.43	0.00	3.43	0.00	0.00	0.00	0.00
Sep	14.68	8.81	5.87	2.38	0.95	1.43	1.43	0.00	1.32	0.00	6.06	1.43
Oct	22.75	13.65	9.10	0.93	0.23	0.71	0.71	0.00	1.32	0.00	12.94	0.71
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	69.72	41.83	27.89	19.51	3.16	16.36	6.69	9.67	1.32	1.32	33.82	8.01
Jan-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	21.28	12.77	8.51	0.49	0.23	0.26	0.26	0.00	1.32	0.00	12.51	0.26
May	17.61	10.57	7.04	2.42	1.21	1.21	1.21	0.00	1.32	0.00	9.36	1.21
Jun	11.74	7.04	4.70	3.82	0.16	3.66	3.66	0.00	1.32	0.00	3.39	3.66
Jul	3.67	2.20	1.47	4.76	0.41	4.35	2.20	2.15	0.00	1.32	0.00	3.52
Aug	0.00	0.00	0.00	3.97	0.47	3.51	0.00	3.51	0.00	0.00	0.00	0.00
Sep	15.41	9.25	6.16	2.55	0.34	2.20	2.20	0.00	1.32	0.00	5.72	2.20
Oct	22.02	13.21	8.81	1.17	0.08	1.09	1.09	0.00	1.32	0.00	12.12	1.09
Nov	0.00	0.00	0.00	0.10	0.04	0.06	0.00	0.06	1.26	0.06	0.00	0.06
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Year Total	91.73	55.04	36.69	19.28	2.94	16.34	10.62	5.72	1.26	1.38	43.10	12.00

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.26	0.00	0.00	0.00
Apr	11.74	7.04	4.70	0.61	0.02	0.58	0.58	0.00	1.32	0.00	6.46	0.58
May	1.47	0.88	0.59	2.32	0.73	1.59	0.88	0.71	0.61	0.71	0.00	1.59
Jun	0.00	0.00	0.00	4.22	0.34	3.88	0.00	3.88	0.00	0.61	0.00	0.61
Jul	0.00	0.00	0.00	5.00	0.00	5.00	0.00	5.00	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	3.79	0.28	3.52	0.00	3.52	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	2.42	0.55	1.87	0.00	1.87	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	0.57	0.19	0.38	0.00	0.38	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	13.21	7.93	5.28	18.93	2.11	16.83	1.46	15.36	0.00	1.32	6.46	2.78
Jan-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	1.20	0.76	0.45	0.00	0.45	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	2.54	0.83	1.70	0.00	1.70	0.00	0.00	0.00	0.00
Jun	12.48	7.49	4.99	3.19	0.46	2.73	2.73	0.00	1.32	1.32	3.44	4.05
Jul	0.00	0.00	0.00	5.10	0.16	4.93	0.00	4.93	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	4.09	1.36	2.74	0.00	2.74	0.00	0.00	0.00	0.00
Sep	8.81	5.29	3.52	2.15	0.09	2.06	2.06	0.00	1.32	0.00	1.90	2.06
Oct	13.94	8.36	5.58	1.49	0.04	1.45	1.45	0.00	1.32	0.00	6.92	1.45
Nov	0.00	0.00	0.00	0.05	0.01	0.05	0.00	0.05	1.27	0.05	0.00	0.05
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Year Total	35.23	21.14	14.09	19.82	3.70	16.11	6.24	9.87	1.27	1.37	12.26	7.61

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00
May	0.00	0.00	0.00	2.76	0.59	2.17	0.00	2.17	0.00	1.27	0.00	1.27
Jun	0.00	0.00	0.00	3.24	1.02	2.22	0.00	2.22	0.00	0.00	0.00	0.00
Jul	0.00	0.00	0.00	4.17	0.86	3.31	0.00	3.31	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	3.37	1.24	2.14	0.00	2.14	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	2.33	1.00	1.33	0.00	1.33	0.00	0.00	0.00	0.00
Oct	4.40	2.64	1.76	1.14	0.34	0.79	0.79	0.00	1.32	0.00	0.53	0.79
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Year Total	4.40	2.64	1.76	17.01	5.05	11.96	0.79	11.17	1.32	1.27	0.53	2.06
Jan-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00
Apr	18.35	11.01	7.34	0.06	0.03	0.03	0.03	0.00	1.32	0.00	10.98	0.03
May	5.14	3.08	2.06	2.44	1.03	1.41	1.41	0.00	1.32	0.00	1.67	1.41
Jun	16.88	10.13	6.75	3.54	1.32	2.22	2.22	0.00	1.32	0.00	7.91	2.22
Jul	0.00	0.00	0.00	4.87	0.13	4.75	0.00	4.75	0.00	1.32	0.00	1.32
Aug	0.73	0.44	0.29	3.75	0.45	3.30	0.44	2.86	0.00	0.00	0.00	0.44
Sep	0.00	0.00	0.00	2.53	0.07	2.46	0.00	2.46	0.00	0.00	0.00	0.00
Oct	15.41	9.25	6.16	1.25	1.04	0.21	0.21	0.00	1.32	0.00	7.71	0.21
Nov	0.00	0.00	0.00	0.16	0.00	0.16	0.00	0.16	1.16	0.16	0.00	0.16
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00
Year Total	56.51	33.91	22.60	18.60	4.06	14.54	4.31	10.23	1.16	1.48	28.27	5.79

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.16	0.00	0.00	0.00
Apr	6.60	3.96	2.64	0.35	0.01	0.34	0.34	0.00	1.32	0.00	3.46	0.34
May	0.00	0.00	0.00	2.78	0.34	2.44	0.00	2.44	0.00	1.32	0.00	1.32
Jun	0.00	0.00	0.00	4.25	0.01	4.24	0.00	4.24	0.00	0.00	0.00	0.00
Jul	0.00	0.00	0.00	4.83	0.39	4.43	0.00	4.43	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	3.96	0.29	3.66	0.00	3.66	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	2.05	0.27	1.78	0.00	1.78	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	1.02	0.67	0.35	0.00	0.35	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	6.60	3.96	2.64	19.24	2.00	17.24	0.34	16.90	0.00	1.32	3.46	1.66

AIV.5. Osborn Farm Historic Consumptive Use Summary Table 1950-2006 – West Field.

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1950	0.00	0.00	0.00	0.05	0.58	1.76	3.10	2.94	1.44	1.27	0.02	0.00	11.16
1951	0.00	0.00	0.00	0.00	1.23	1.30	3.35	0.88	1.66	0.15	0.00	0.00	8.57
1952	0.00	0.00	0.00	0.26	0.99	2.88	3.77	3.18	1.32	0.44	0.00	0.00	12.84
1953	0.00	0.00	0.00	0.00	0.95	2.60	3.76	3.08	2.19	1.23	0.04	0.00	13.85
1954	0.00	0.00	0.00	0.00	1.32	0.00	0.00	0.00	0.00	1.05	0.06	0.00	2.43
1955	0.00	0.00	0.00	0.17	1.85	0.00	0.00	3.29	1.56	1.07	0.00	0.00	7.94
1956	0.00	0.00	0.00	0.34	0.98	0.00	0.00	2.59	0.50	0.00	0.00	0.00	4.41
1957	0.00	0.00	0.00	0.00	0.06	2.93	4.16	2.51	1.73	0.47	0.00	0.00	11.86
1958	0.00	0.00	0.00	0.03	0.95	2.70	3.17	3.51	2.22	0.94	0.00	0.00	13.52
1959	0.00	0.00	0.00	0.13	0.96	3.60	3.08	0.00	0.44	0.14	0.00	0.00	8.35
1960	0.00	0.00	0.00	0.00	1.35	3.33	3.88	0.44	0.00	0.45	0.00	0.00	9.45
1961	0.00	0.00	0.00	0.20	0.09	2.67	2.41	2.22	0.44	0.53	0.00	0.00	8.56
1962	0.00	0.00	0.00	0.00	1.61	2.32	1.32	0.00	0.00	0.00	0.00	0.00	5.25
1963	0.00	0.00	0.00	0.00	0.00	2.19	1.32	0.00	1.76	1.36	0.12	0.00	6.75
1964	0.00	0.00	0.00	0.18	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.20
1965	0.00	0.00	0.00	0.00	0.00	0.00	3.24	3.23	0.79	1.18	0.19	0.00	8.63
1966	0.00	0.00	0.00	0.00	1.63	2.71	2.20	0.00	3.20	0.88	0.00	0.00	10.62
1967	0.00	0.00	0.00	0.14	0.45	1.66	2.87	1.76	1.84	1.06	0.00	0.00	9.78
1968	0.00	0.00	0.00	0.08	0.91	3.29	1.32	0.00	0.00	0.87	0.00	0.00	6.47
1969	0.00	0.00	0.00	0.14	1.17	1.87	4.08	1.76	2.13	0.00	0.00	0.00	11.15
1970	0.00	0.00	0.00	0.36	1.43	2.39	3.17	0.35	1.44	0.36	0.00	0.00	9.50
1971	0.00	0.00	0.00	0.00	1.30	3.68	1.32	0.00	0.66	0.63	0.00	0.00	7.59
1972	0.00	0.00	0.00	0.00	2.15	3.13	1.32	0.00	1.99	0.75	0.00	0.00	9.34
1973	0.00	0.00	0.00	0.52	1.66	3.48	2.91	3.85	1.44	1.05	0.00	0.00	14.91
1974	0.00	0.00	0.00	0.50	2.76	2.40	2.64	3.31	1.61	0.58	0.00	0.00	13.80
1975	0.00	0.00	0.00	0.28	0.55	2.50	3.93	1.32	0.00	0.87	0.00	0.00	9.45
1976	0.00	0.00	0.00	0.74	1.88	2.97	1.32	0.00	1.51	0.70	0.00	0.00	9.12
1977	0.00	0.00	0.00	0.43	0.00	0.00	1.76	2.64	2.20	0.00	0.00	0.00	7.03
1978	0.00	0.00	0.00	0.00	0.23	1.32	0.00	0.00	0.00	0.00	0.00	0.00	1.55
1979	0.00	0.00	0.00	0.00	0.43	2.18	3.95	2.20	2.12	0.93	0.00	0.00	11.81
1980	0.00	0.00	0.00	0.23	0.93	3.92	4.09	1.19	2.14	0.79	0.00	0.00	13.29
1981	0.00	0.00	0.00	1.17	0.15	0.00	1.32	0.00	2.12	0.85	0.00	0.00	5.61
1982	0.00	0.00	0.00	0.00	0.55	1.48	2.37	1.15	0.94	0.67	0.00	0.00	7.16
1983	0.00	0.00	0.00	0.00	0.86	1.79	3.68	3.78	2.32	1.14	0.00	0.00	13.57
1984	0.00	0.00	0.00	0.05	1.91	2.42	3.60	3.61	1.84	0.02	0.00	0.00	13.45
1985	0.00	0.00	0.00	0.75	2.29	2.44	2.81	3.61	1.47	0.53	0.00	0.00	13.90

AIV.5. Osborn Farm Historic Consumptive Use Summary Table 1950-2006 – West Field.

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1986	0.00	0.00	0.00	0.48	1.77	3.31	3.84	0.57	1.79	0.50	0.00	0.00	12.26
1987	0.00	0.00	0.00	0.84	1.41	2.81	3.99	3.20	1.96	0.96	0.00	0.00	15.17
1988	0.00	0.00	0.00	0.38	1.58	3.42	3.52	0.00	1.47	1.34	0.09	0.00	11.80
1989	0.00	0.00	0.00	0.72	1.61	2.56	1.32	0.00	1.36	0.91	0.00	0.00	8.48
1990	0.00	0.00	0.00	0.87	1.21	3.73	1.71	2.92	2.09	0.96	0.05	0.00	13.54
1991	0.00	0.00	0.00	0.69	1.69	2.17	2.15	0.00	1.93	0.82	0.00	0.00	9.45
1992	0.00	0.00	0.00	1.28	1.32	1.27	1.32	2.23	2.42	1.12	0.00	0.00	10.96
1993	0.00	0.00	0.00	0.32	2.02	2.36	1.32	0.00	1.10	0.26	0.00	0.00	7.38
1994	0.00	0.00	0.00	0.13	2.41	1.55	0.00	0.00	1.76	0.58	0.00	0.00	6.43
1995	0.00	0.00	0.00	0.07	0.00	1.81	3.76	4.00	1.18	1.05	0.06	0.00	11.93
1996	0.00	0.00	0.00	0.10	1.04	2.79	3.69	2.47	1.66	0.97	0.00	0.00	12.72
1997	0.00	0.00	0.00	0.16	1.96	2.48	1.82	1.76	1.70	0.59	0.00	0.00	10.47
1998	0.00	0.00	0.00	0.43	1.97	2.59	3.51	3.64	2.47	0.22	0.00	0.00	14.83
1999	0.00	0.00	0.00	0.00	1.60	2.39	4.11	2.91	1.17	0.90	0.21	0.00	13.29
2000	0.00	0.00	0.00	0.83	2.40	2.20	0.44	0.00	1.43	0.71	0.00	0.00	8.01
2001	0.00	0.00	0.00	0.26	1.21	3.66	3.52	0.00	2.20	1.09	0.06	0.00	12.00
2002	0.00	0.00	0.00	0.58	1.59	0.61	0.00	0.00	0.00	0.00	0.00	0.00	2.78
2003	0.00	0.00	0.00	0.00	0.00	4.05	0.00	0.00	2.06	1.45	0.05	0.00	7.61
2004	0.00	0.00	0.00	0.00	1.27	0.00	0.00	0.00	0.00	0.79	0.00	0.00	2.06
2005	0.00	0.00	0.00	0.03	1.41	2.22	1.32	0.44	0.00	0.21	0.16	0.00	5.79
2006	0.00	0.00	0.00	0.34	1.32	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.66
	0.00	**0.00**	**0.00**	**0.27**	**1.19**	**2.14**	**2.26**	**1.45**	**1.35**	**0.67**	**0.02**	**0.00**	**9.34**

AIV.6. Osborn Farm Historic Net Deep Percolation and Runoff Summary Table 1950-2006 – West Field.

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1950	0.00	0.00	0.00	10.07	0.74	0.00	9.23	10.71	7.36	8.42	0.00	0.00	46.54
1951	0.00	0.00	0.00	13.21	1.41	0.00	3.69	4.84	9.78	13.50	0.00	0.00	46.45
1952	0.00	0.00	0.00	12.96	10.02	5.49	9.88	7.83	0.00	0.00	0.00	0.00	46.17
1953	0.00	0.00	0.00	13.21	3.46	0.00	4.21	0.00	5.30	0.00	0.00	0.00	26.18
1954	0.00	0.00	0.00	0.62	0.00	0.00	0.00	0.00	0.00	1.15	0.00	0.00	1.76
1955	0.00	0.00	0.00	4.67	3.43	0.00	0.00	0.24	11.65	2.46	0.00	0.00	22.44
1956	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1957	0.00	0.00	0.00	12.90	13.59	10.28	9.49	11.14	11.48	13.18	0.00	0.00	82.06
1958	0.00	0.00	0.00	13.18	12.70	10.51	1.68	10.14	10.99	12.71	0.00	0.00	71.91
1959	0.00	0.00	0.00	13.08	12.69	1.69	0.00	0.00	0.00	12.19	0.00	0.00	39.65
1960	0.00	0.00	0.00	11.01	10.98	7.24	9.77	0.00	0.00	3.95	0.00	0.00	42.95
1961	0.00	0.00	0.00	12.57	8.28	8.34	9.03	10.55	5.28	13.12	0.00	0.00	67.17
1962	0.00	0.00	0.00	10.13	10.28	9.13	0.00	0.00	0.00	0.00	0.00	0.00	29.53
1963	0.00	0.00	0.00	0.00	0.00	3.10	0.00	0.00	1.76	8.33	0.00	0.00	13.19
1964	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1965	0.00	0.00	0.00	0.00	0.00	0.00	4.24	3.81	12.42	12.47	0.00	0.00	32.94
1966	0.00	0.00	0.00	13.21	12.02	10.51	0.00	0.00	6.49	3.96	0.00	0.00	46.19
1967	0.00	0.00	0.00	0.00	0.29	11.55	9.46	0.00	10.05	12.59	0.00	0.00	43.95
1968	0.00	0.00	0.00	13.14	5.25	2.87	0.00	0.00	0.00	4.86	0.00	0.00	26.12
1969	0.00	0.00	0.00	9.10	9.40	11.35	6.05	0.00	2.27	13.65	0.00	0.00	51.82
1970	0.00	0.00	0.00	12.85	11.34	10.82	0.00	0.00	4.29	13.29	0.00	0.00	52.59
1971	0.00	0.00	0.00	13.21	12.35	8.65	0.00	0.00	3.31	13.02	0.00	0.00	50.54
1972	0.00	0.00	0.00	8.81	1.37	3.03	0.00	0.00	9.45	12.90	0.00	0.00	35.57
1973	0.00	0.00	0.00	12.69	11.99	9.73	1.49	9.80	11.78	12.60	0.00	0.00	70.06
1974	0.00	0.00	0.00	12.27	0.33	7.29	0.00	4.18	10.28	12.64	0.00	0.00	46.98
1975	0.00	0.00	0.00	8.97	0.77	9.39	0.48	0.00	0.00	11.03	0.00	0.00	30.63
1976	0.00	0.00	0.00	5.42	4.73	0.11	0.00	0.00	0.00	0.00	0.00	0.00	10.26
1977	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1978	0.00	0.00	0.00	0.00	1.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.58
1979	0.00	0.00	0.00	0.44	12.33	10.59	6.18	11.01	10.65	12.28	0.00	0.00	63.49
1980	0.00	0.00	0.00	12.98	12.72	9.29	0.00	0.00	4.91	8.46	0.00	0.00	48.35
1981	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.25	12.36	0.00	0.00	18.61
1982	0.00	0.00	0.00	0.00	0.77	1.60	0.00	0.00	4.78	12.54	0.00	0.00	19.70
1983	0.00	0.00	0.00	12.77	12.35	10.98	9.54	9.43	10.44	12.07	0.00	0.00	77.58
1984	0.00	0.00	0.00	13.16	11.74	10.79	6.96	0.00	8.20	13.63	0.00	0.00	64.49
1985	0.00	0.00	0.00	12.01	10.92	10.33	2.48	0.00	8.13	12.69	0.00	0.00	56.57
1986	0.00	0.00	0.00	12.29	11.44	8.58	0.00	0.00	8.77	12.71	0.00	0.00	53.79
1987	0.00	0.00	0.00	11.92	11.80	8.20	1.73	8.69	10.81	12.25	0.00	0.00	65.40
1988	0.00	0.00	0.00	12.83	10.31	5.83	0.00	0.00	7.33	12.31	0.00	0.00	48.61

1989	0.00	0.00	0.00	8.97	0.00	2.87	0.00	0.00	6.57	12.30	0.00	0.00	30.70
1990	0.00	0.00	0.00	11.89	12.00	6.40	0.00	5.89	4.07	12.25	0.00	0.00	52.51
1991	0.00	0.00	0.00	12.08	4.47	7.96	0.00	0.00	5.12	12.40	0.00	0.00	42.02
1992	0.00	0.00	0.00	11.05	0.00	4.45	0.00	0.00	10.33	12.53	0.00	0.00	38.36
1993	0.00	0.00	0.00	12.45	2.38	6.44	0.00	0.00	7.27	12.95	0.00	0.00	41.50
1994	0.00	0.00	0.00	7.36	0.00	0.00	0.00	0.00	0.00	11.31	0.00	0.00	18.68
1995	0.00	0.00	0.00	12.70	13.21	10.96	9.46	0.00	6.26	12.16	0.00	0.00	64.75
1996	0.00	0.00	0.00	3.42	2.92	10.42	0.00	0.00	10.24	12.68	0.00	0.00	39.68
1997	0.00	0.00	0.00	11.29	11.25	10.28	1.70	11.46	11.07	12.62	0.00	0.00	69.67
1998	0.00	0.00	0.00	12.34	11.25	5.33	0.00	9.14	10.30	12.99	0.00	0.00	61.35
1999	0.00	0.00	0.00	12.77	11.61	10.38	0.29	10.30	11.60	12.31	0.00	0.00	69.26
2000	0.00	0.00	0.00	12.38	2.44	0.00	0.00	0.00	6.06	12.94	0.00	0.00	33.83
2001	0.00	0.00	0.00	12.51	9.36	3.39	0.00	0.00	5.72	12.12	0.00	0.00	43.10
2002	0.00	0.00	0.00	6.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.46
2003	0.00	0.00	0.00	0.00	0.00	3.44	0.00	0.00	1.90	6.92	0.00	0.00	12.25
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.53	0.00	0.00	0.53
2005	0.00	0.00	0.00	10.98	1.67	7.91	0.00	0.00	0.00	7.71	0.00	0.00	28.27
2006	0.00	0.00	0.00	3.62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.62
	0.00	**0.00**	**0.00**	**8.56**	**5.89**	**5.39**	**2.05**	**2.44**	**5.45**	**8.95**	**0.00**	**0.00**	**38.74**

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	31.93	19.16	12.77	0.00	0.00	0.00	0.00	0.00	7.09	0.00	19.16	0.00
May	4.17	2.50	1.67	2.65	1.67	0.98	0.98	0.00	7.09	0.00	1.52	0.98
Jun	1.39	0.83	0.56	7.08	1.28	5.80	0.83	4.97	2.12	4.97	0.00	5.80
Jul	43.04	25.82	17.22	9.63	1.43	8.20	8.20	0.00	7.09	0.00	12.66	8.20
Aug	43.04	25.82	17.22	9.11	0.61	8.50	8.50	0.00	7.09	0.00	17.33	8.50
Sep	27.77	16.66	11.11	5.54	1.52	4.02	4.02	0.00	7.09	0.00	12.64	4.02
Oct	30.54	18.32	12.22	0.41	0.02	0.39	0.39	0.00	7.09	0.00	17.93	0.39
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	181.88	109.13	72.75	34.42	6.52	27.89	22.92	4.97	7.09	4.97	81.24	27.89
Jan-51	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	24.99	0.00
May	8.33	5.00	3.33	3.61	1.58	2.03	2.03	0.00	7.09	0.00	2.97	2.03
Jun	0.00	0.00	0.00	5.96	1.88	4.08	0.00	4.08	3.01	4.08	0.00	4.08
Jul	26.38	15.83	10.55	11.71	2.14	9.57	9.57	0.00	7.09	0.00	2.17	9.57
Aug	18.05	10.83	7.22	9.49	6.30	3.19	3.19	0.00	7.09	0.00	7.64	3.19
Sep	36.10	21.66	14.44	4.19	0.66	3.53	3.53	0.00	7.09	0.00	18.13	3.53
Oct	43.04	25.82	17.22	0.67	0.44	0.23	0.23	0.00	7.09	0.00	25.59	0.23
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	173.55	104.13	69.42	35.63	12.99	22.64	18.55	4.08	7.09	4.08	81.49	22.63

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-52	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.35	0.12	0.23	0.23	0.00	7.09	0.00	24.76	0.23
May	34.71	20.83	13.88	4.05	2.37	1.68	1.68	0.00	7.09	0.00	19.15	1.68
Jun	26.38	15.83	10.55	8.62	2.36	6.25	6.25	0.00	7.09	0.00	9.57	6.25
Jul	43.04	25.82	17.22	11.12	0.79	10.33	10.33	0.00	7.09	0.00	15.50	10.33
Aug	34.71	20.83	13.88	10.26	1.04	9.22	9.22	0.00	7.09	0.00	11.61	9.22
Sep	0.00	0.00	0.00	6.29	0.00	6.29	0.00	6.29	1.04	6.29	0.00	6.29
Oct	1.39	0.83	0.56	0.44	0.01	0.43	0.43	0.00	1.44	0.00	0.00	0.43
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.00
Year Total	181.88	109.13	72.75	41.13	6.70	34.43	28.14	6.29	1.44	6.29	80.59	34.43
Jan-53	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.44	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	19.34	0.00
May	13.88	8.33	5.55	2.42	0.78	1.64	1.64	0.00	7.09	0.00	6.68	1.64
Jun	5.55	3.33	2.22	7.93	2.58	5.35	3.33	2.02	5.07	2.02	0.00	5.35
Jul	27.77	16.66	11.11	11.28	1.36	9.92	9.92	0.00	7.09	0.00	4.72	9.92
Aug	5.55	3.33	2.22	10.11	0.69	9.42	3.33	6.09	1.22	6.09	0.00	9.42
Sep	27.77	16.66	11.11	6.39	0.43	5.96	5.96	0.00	7.09	0.00	4.84	5.96
Oct	0.00	0.00	0.00	0.57	0.00	0.57	0.00	0.57	6.52	0.57	0.00	0.57
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.52	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.52	0.00	0.00	0.00
Year Total	122.17	73.30	48.87	38.71	5.84	32.87	24.18	8.68	6.52	8.68	35.58	32.86

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-54	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.52	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.52	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.52	0.00	0.00	0.00
Apr	4.17	2.50	1.67	0.00	0.00	0.00	0.00	0.00	7.09	0.00	1.80	0.00
May	0.00	0.00	0.00	4.19	0.87	3.33	0.00	3.33	3.76	3.33	0.00	3.33
Jun	0.00	0.00	0.00	8.34	0.90	7.44	0.00	7.44	0.00	3.76	0.00	3.76
Jul	0.00	0.00	0.00	13.20	1.13	12.07	0.00	12.07	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	10.54	1.34	9.20	0.00	9.20	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	6.43	0.93	5.49	0.00	5.49	0.00	0.00	0.00	0.00
Oct	11.11	6.67	4.44	0.90	0.06	0.84	0.84	0.00	5.83	0.00	0.00	0.84
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.83	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.83	0.00	0.00	0.00
Year Total	15.28	9.17	6.11	43.60	5.22	38.38	0.84	37.53	5.83	7.09	1.80	7.93
Jan-55	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.83	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.83	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.83	0.00	0.00	0.00
Apr	15.27	9.16	6.11	0.23	0.01	0.22	0.22	0.00	7.09	0.00	8.85	0.22
May	16.66	10.00	6.66	4.68	1.30	3.38	3.38	0.00	7.09	0.00	6.62	3.38
Jun	0.00	0.00	0.00	6.90	2.32	4.58	0.00	4.58	2.51	4.58	0.00	4.58
Jul	0.00	0.00	0.00	12.53	1.42	11.11	0.00	11.11	0.00	2.51	0.00	2.51
Aug	15.27	9.16	6.11	11.10	1.55	9.55	9.16	0.39	0.00	0.00	0.00	9.16
Sep	41.65	24.99	16.66	6.08	1.72	4.36	4.36	0.00	7.09	0.00	13.54	4.36
Oct	11.11	6.67	4.44	0.66	0.01	0.65	0.65	0.00	7.09	0.00	6.02	0.65
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	99.96	59.98	39.98	42.18	8.33	33.86	17.77	16.08	7.09	7.09	35.03	24.86

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.29	0.09	0.20	0.00	0.20	6.89	0.20	0.00	0.20
May	0.00	0.00	0.00	4.82	1.97	2.85	0.00	2.85	4.04	4.04	0.00	4.04
Jun	0.00	0.00	0.00	9.04	0.27	8.77	0.00	8.77	0.00	0.00	0.00	0.00
Jul	0.00	0.00	0.00	11.33	2.36	8.97	0.00	8.97	0.00	0.00	0.00	0.00
Aug	9.72	5.83	3.89	9.57	1.93	7.64	5.83	1.81	0.00	0.00	0.00	5.83
Sep	0.00	0.00	0.00	6.49	0.00	6.49	0.00	6.49	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	1.19	0.00	1.19	0.00	1.19	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	9.72	5.83	3.89	42.73	6.62	36.11	5.83	30.28	0.00	4.24	0.00	10.07
Jan-57	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	17.90	0.00
May	43.04	25.82	17.22	2.53	2.04	0.49	0.49	0.00	7.09	0.00	25.33	0.49
Jun	41.65	24.99	16.66	7.23	0.99	6.24	6.24	0.00	7.09	0.00	18.75	6.24
Jul	43.04	25.82	17.22	11.71	0.45	11.25	11.25	0.00	7.09	0.00	14.57	11.25
Aug	43.04	25.82	17.22	10.55	3.06	7.49	7.49	0.00	7.09	0.00	18.33	7.49
Sep	41.65	24.99	16.66	4.31	0.55	3.76	3.76	0.00	7.09	0.00	21.23	3.76
Oct	43.04	25.82	17.22	0.00	0.00	0.00	0.00	0.00	7.09	0.00	25.82	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	297.11	178.27	118.84	36.33	7.09	29.24	29.23	0.00	7.09	0.00	141.93	29.23

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.07	0.03	0.05	0.05	0.00	7.09	0.00	24.94	0.05
May	43.04	25.82	17.22	5.25	3.69	1.57	1.57	0.00	7.09	0.00	24.26	1.57
Jun	41.65	24.99	16.66	8.32	2.20	6.12	6.12	0.00	7.09	0.00	18.87	6.12
Jul	15.27	9.16	6.11	10.62	1.68	8.94	8.94	0.00	7.09	0.00	0.22	8.94
Aug	43.04	25.82	17.22	11.24	1.12	10.11	10.11	0.00	7.09	0.00	15.71	10.11
Sep	41.65	24.99	16.66	6.36	0.41	5.95	5.95	0.00	7.09	0.00	19.04	5.95
Oct	43.04	25.82	17.22	0.15	0.02	0.12	0.12	0.00	7.09	0.00	25.70	0.12
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	269.34	161.60	107.74	42.01	9.15	32.86	32.86	0.00	7.09	0.00	128.74	32.86
Jan-59	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	24.99	0.00
May	43.04	25.82	17.22	3.60	2.04	1.57	1.57	0.00	7.09	0.00	24.26	1.57
Jun	16.66	10.00	6.66	8.26	0.36	7.91	7.91	0.00	7.09	0.00	2.09	7.91
Jul	5.55	3.33	2.22	11.58	0.29	11.28	3.33	7.95	0.00	7.09	0.00	10.42
Aug	0.00	0.00	0.00	11.16	0.65	10.50	0.00	10.50	0.00	0.00	0.00	0.00
Sep	1.39	0.83	0.56	5.36	1.70	3.66	0.83	2.83	0.00	0.00	0.00	0.83
Oct	43.04	25.82	17.22	0.16	0.09	0.07	0.07	0.00	7.09	0.00	19.72	0.07
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	151.33	90.80	60.53	40.12	5.13	34.99	13.71	21.28	7.09	7.09	71.06	20.80

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-60	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	34.71	20.83	13.88	0.00	0.00	0.00	0.00	0.00	7.09	0.00	20.83	0.00
May	38.88	23.33	15.55	4.00	1.67	2.33	2.33	0.00	7.09	0.00	21.00	2.33
Jun	33.32	19.99	13.33	8.07	0.72	7.36	7.36	0.00	7.09	0.00	12.64	7.36
Jul	43.04	25.82	17.22	11.65	0.90	10.75	10.75	0.00	7.09	0.00	15.08	10.75
Aug	1.39	0.83	0.56	10.58	0.00	10.58	0.83	9.75	0.00	7.09	0.00	7.92
Sep	0.00	0.00	0.00	6.35	0.33	6.02	0.00	6.02	0.00	0.00	0.00	0.00
Oct	18.05	10.83	7.22	1.28	0.65	0.63	0.63	0.00	7.09	0.00	3.95	0.63
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	169.39	101.63	67.76	41.94	4.27	37.67	21.90	15.77	7.09	7.09	73.50	28.99
Jan-61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	0.20	0.04	0.16	0.16	0.00	7.09	0.00	23.99	0.16
May	26.38	15.83	10.55	4.05	3.53	0.52	0.52	0.00	7.09	0.00	15.31	0.52
Jun	34.71	20.83	13.88	7.64	1.75	5.89	5.89	0.00	7.09	0.00	14.93	5.89
Jul	36.10	21.66	14.44	11.22	4.17	7.05	7.05	0.00	7.09	0.00	14.61	7.05
Aug	40.26	24.16	16.10	10.62	3.86	6.76	6.76	0.00	7.09	0.00	17.40	6.76
Sep	18.05	10.83	7.22	4.06	2.65	1.41	1.41	0.00	7.09	0.00	9.42	1.41
Oct	43.04	25.82	17.22	0.00	0.00	0.00	0.00	0.00	7.09	0.00	25.82	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	238.80	143.28	95.52	37.78	15.99	21.79	21.79	0.00	7.09	0.00	121.48	21.79

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-62	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	31.93	19.16	12.77	0.00	0.00	0.00	0.00	0.00	7.09	0.00	19.16	0.00
May	37.49	22.49	15.00	4.78	1.85	2.93	2.93	0.00	7.09	0.00	19.56	2.93
Jun	36.10	21.66	14.44	7.52	1.99	5.52	5.52	0.00	7.09	0.00	16.14	5.52
Jul	0.00	0.00	0.00	11.17	2.20	8.97	0.00	8.97	0.00	7.09	0.00	7.09
Aug	0.00	0.00	0.00	9.64	0.27	9.37	0.00	9.37	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	3.67	0.22	3.46	0.00	3.46	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	1.16	0.43	0.73	0.00	0.73	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	105.52	63.31	42.21	37.94	6.96	30.98	8.45	22.53	0.00	7.09	54.86	15.54
Jan-63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.59	0.05	0.54	0.00	0.54	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	4.97	0.33	4.64	0.00	4.64	0.00	0.00	0.00	0.00
Jun	20.83	12.50	8.33	8.29	3.38	4.90	4.90	0.00	7.09	0.00	0.51	4.90
Jul	0.00	0.00	0.00	12.74	0.03	12.70	0.00	12.70	0.00	7.09	0.00	7.09
Aug	0.00	0.00	0.00	10.29	1.77	8.52	0.00	8.52	0.00	0.00	0.00	0.00
Sep	15.27	9.16	6.11	6.77	1.92	4.85	4.85	0.00	4.31	0.00	0.00	4.85
Oct	30.54	18.32	12.22	1.89	0.10	1.79	1.79	0.00	7.09	0.00	13.76	1.79
Nov	0.00	0.00	0.00	0.04	0.00	0.03	0.00	0.03	7.06	0.03	0.00	0.03
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.06	0.00	0.00	0.00
Year Total	66.64	39.98	26.66	45.57	7.59	37.98	11.54	26.43	7.06	7.12	14.27	18.66

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.06	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.06	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.06	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.36	0.11	0.24	0.00	0.24	6.82	0.24	0.00	0.24
May	0.00	0.00	0.00	4.69	1.44	3.24	0.00	3.24	3.58	3.24	0.00	3.24
Jun	0.00	0.00	0.00	7.35	0.51	6.83	0.00	6.83	0.00	3.58	0.00	3.58
Jul	0.00	0.00	0.00	12.93	1.22	11.70	0.00	11.70	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	9.60	0.45	9.16	0.00	9.16	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	5.68	0.26	5.42	0.00	5.42	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	1.01	0.00	1.01	0.00	1.01	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	0.00	0.00	0.00	41.60	3.99	37.61	0.00	37.60 0.00	0.00	7.06	0.00	7.06
Jan-65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.76	0.17	0.58	0.00	0.58	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	3.96	1.30	2.67	0.00	2.67	0.00	0.00	0.00	0.00
Jun	0.00	0.00	0.00	7.22	4.38	2.84	0.00	2.84	0.00	0.00	0.00	0.00
Jul	27.77	16.66	11.11	11.81	2.46	9.35	9.35	0.00	7.09	0.00	0.60	9.35
Aug	22.21	13.33	8.88	9.57	0.43	9.14	9.14	0.00	7.09	0.00	4.19	9.14
Sep	41.65	24.99	16.66	2.75	1.09	1.66	1.66	0.00	7.09	0.00	23.33	1.66
Oct	43.04	25.82	17.22	0.00	0.00	0.00	0.00	0.00	7.09	0.00	25.82	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	134.67	80.80	53.87	36.08	9.83	26.25	20.15	6.09	7.09	0.00	53.94	20.15

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	24.99	0.00
May	43.04	25.82	17.22	3.36	0.12	3.25	3.25	0.00	7.09	0.00	22.58	3.25
Jun	41.65	24.99	16.66	7.45	1.53	5.92	5.92	0.00	7.09	0.00	19.07	5.92
Jul	2.78	1.67	1.11	13.07	0.72	12.35	1.67	10.68	0.00	7.09	0.00	8.76
Aug	0.00	0.00	0.00	9.90	0.66	9.24	0.00	9.24	0.00	0.00	0.00	0.00
Sep	30.54	18.32	12.22	6.20	1.08	5.12	5.12	0.00	7.09	0.00	6.11	5.12
Oct	15.27	9.16	6.11	0.32	0.03	0.30	0.30	0.00	7.09	0.00	8.86	0.30
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	174.93	104.96	69.97	40.32	4.14	36.17	16.26	19.92	7.09	7.09	81.61	23.35
Jan-67	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.48	0.26	0.22	0.00	0.22	6.87	0.22	0.00	0.22
May	2.78	1.67	1.11	3.05	2.16	0.89	0.89	0.00	7.09	0.00	0.56	0.89
Jun	41.65	24.99	16.66	5.96	2.77	3.19	3.19	0.00	7.09	0.00	21.80	3.19
Jul	38.88	23.33	15.55	10.32	3.06	7.26	7.26	0.00	7.09	0.00	16.07	7.26
Aug	1.39	0.83	0.56	9.93	1.87	8.06	0.83	7.23	0.00	7.09	0.00	7.92
Sep	41.65	24.99	16.66	6.10	0.87	5.23	5.23	0.00	7.09	0.00	13.38	5.23
Oct	43.04	25.82	17.22	2.08	0.27	1.81	1.81	0.00	7.09	0.00	24.01	1.81
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	169.39	101.63	67.76	37.92	11.26	26.65	19.21	7.45	7.09	7.31	75.82	26.52

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-68	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	24.99	0.00
May	19.44	11.66	7.78	3.03	1.57	1.46	1.46	0.00	7.09	0.00	10.20	1.46
Jun	19.44	11.66	7.78	7.82	0.86	6.97	6.97	0.00	7.09	0.00	4.70	6.97
Jul	0.00	0.00	0.00	10.87	2.16	8.72	0.00	8.72	0.00	7.09	0.00	7.09
Aug	0.00	0.00	0.00	9.64	2.12	7.51	0.00	7.51	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	5.66	0.00	5.66	0.00	5.66	0.00	0.00	0.00	0.00
Oct	22.21	13.33	8.88	1.12	0.16	0.96	0.96	0.00	7.09	0.00	5.28	0.96
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	102.74	61.64	41.10	38.13	6.86	31.27	9.39	21.89	7.09	7.09	45.17	16.48
Jan-69	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	29.16	17.50	11.66	0.25	0.06	0.19	0.19	0.00	7.09	0.00	17.31	0.19
May	33.32	19.99	13.33	5.05	3.07	1.98	1.98	0.00	7.09	0.00	18.01	1.98
Jun	41.65	24.99	16.66	6.64	2.28	4.35	4.35	0.00	7.09	0.00	20.64	4.35
Jul	31.93	19.16	12.77	12.51	0.97	11.53	11.53	0.00	7.09	0.00	7.62	11.53
Aug	1.39	0.83	0.56	11.17	1.85	9.31	0.83	8.48	0.00	7.09	0.00	7.92
Sep	18.05	10.83	7.22	6.00	0.55	5.44	5.44	0.00	5.39	0.00	0.00	5.44
Oct	43.04	25.82	17.22	0.47	0.47	0.00	0.00	0.00	7.09	0.00	24.44	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	198.54	119.12	79.42	42.07	9.26	32.82	24.32	8.48	7.09	7.09	88.02	31.41

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-70	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.07	0.01	0.05	0.05	0.00	7.09	0.00	24.94	0.05
May	40.26	24.16	16.10	4.59	2.13	2.47	2.47	0.00	7.09	0.00	21.69	2.47
Jun	41.65	24.99	16.66	7.61	2.26	5.34	5.34	0.00	7.09	0.00	19.65	5.34
Jul	6.94	4.16	2.78	11.90	2.81	9.09	4.16	4.93	2.16	4.93	0.00	9.09
Aug	0.00	0.00	0.00	11.14	1.07	10.07	0.00	10.07	0.00	2.16	0.00	2.16
Sep	22.21	13.33	8.88	4.79	1.23	3.55	3.55	0.00	7.09	0.00	2.68	3.55
Oct	43.04	25.82	17.22	0.35	0.11	0.24	0.24	0.00	7.09	0.00	25.58	0.24
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	195.75	117.45	78.30	40.45	9.63	30.82	15.81	15.00	7.09	7.09	94.54	22.90
Jan-71	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.20	0.15	0.05	0.05	0.00	7.09	0.00	24.94	0.05
May	43.04	25.82	17.22	3.68	1.46	2.22	2.22	0.00	7.09	0.00	23.60	2.22
Jun	38.88	23.33	15.55	8.36	0.12	8.23	8.23	0.00	7.09	0.00	15.09	8.23
Jul	0.00	0.00	0.00	11.08	0.55	10.52	0.00	10.52	0.00	7.09	0.00	7.09
Aug	0.00	0.00	0.00	10.69	0.12	10.57	0.00	10.57	0.00	0.00	0.00	0.00
Sep	16.66	10.00	6.66	3.34	1.75	1.59	1.59	0.00	7.09	0.00	1.32	1.59
Oct	43.04	25.82	17.22	0.00	0.00	0.00	0.00	0.00	7.09	0.00	25.82	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	183.27	109.96	73.31	37.35	4.16	33.18	12.09	21.09	7.09	7.09	90.77	19.18

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-72	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	27.77	16.66	11.11	0.00	0.00	0.00	0.00	0.00	7.09	0.00	16.66	0.00
May	11.11	6.67	4.44	4.37	0.40	3.97	3.97	0.00	7.09	0.00	2.70	3.97
Jun	19.44	11.66	7.78	8.32	1.40	6.93	6.93	0.00	7.09	0.00	4.73	6.93
Jul	0.00	0.00	0.00	10.61	0.78	9.83	0.00	9.83	0.00	7.09	0.00	7.09
Aug	0.00	0.00	0.00	10.16	2.28	7.88	0.00	7.88	0.00	0.00	0.00	0.00
Sep	40.26	24.16	16.10	5.91	0.46	5.46	5.46	0.00	7.09	0.00	11.61	5.46
Oct	43.04	25.82	17.22	1.70	0.25	1.45	1.45	0.00	7.09	0.00	24.37	1.45
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	141.62	84.97	56.65	41.08	5.56	35.52	17.81	17.71	7.09	7.09	60.07	24.90
Jan-73	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.27	0.08	0.20	0.20	0.00	7.09	0.00	24.79	0.20
May	43.04	25.82	17.22	4.03	1.14	2.90	2.90	0.00	7.09	0.00	22.92	2.90
Jun	41.65	24.99	16.66	8.08	0.30	7.78	7.78	0.00	7.09	0.00	17.21	7.78
Jul	13.88	8.33	5.55	10.88	2.63	8.25	8.25	0.00	7.09	0.00	0.08	8.25
Aug	43.04	25.82	17.22	11.09	0.11	10.98	10.98	0.00	7.09	0.00	14.84	10.98
Sep	41.65	24.99	16.66	5.23	1.43	3.80	3.80	0.00	7.09	0.00	21.19	3.80
Oct	43.04	25.82	17.22	1.42	0.14	1.29	1.29	0.00	7.09	0.00	24.54	1.29
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	267.95	160.77	107.18	41.01	5.82	35.19	35.20	0.00	7.09	0.00	125.57	35.20

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-74	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	0.72	0.22	0.51	0.51	0.00	7.09	0.00	23.65	0.51
May	9.72	5.83	3.89	5.50	0.00	5.50	5.50	0.00	7.09	0.00	0.33	5.50
Jun	30.54	18.32	12.22	8.64	2.82	5.82	5.82	0.00	7.09	0.00	12.51	5.82
Jul	4.17	2.50	1.67	12.66	1.88	10.78	2.50	8.28	0.00	7.09	0.00	9.59
Aug	27.77	16.66	11.11	9.18	0.01	9.16	9.16	0.00	7.09	0.00	0.54	9.16
Sep	37.49	22.49	15.00	3.75	0.66	3.09	3.09	0.00	7.09	0.00	19.41	3.09
Oct	41.65	24.99	16.66	1.56	0.74	0.82	0.82	0.00	7.09	0.00	24.17	0.82
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	191.60	114.96	76.64	42.02	6.34	35.68	27.40	8.28	7.09	7.09	80.61	34.49
Jan-75	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	29.16	17.50	11.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	17.50	0.00
May	4.17	2.50	1.67	3.03	2.07	0.96	0.96	0.00	7.09	0.00	1.54	0.96
Jun	37.49	22.49	15.00	6.90	1.65	5.25	5.25	0.00	7.09	0.00	17.24	5.25
Jul	13.88	8.33	5.55	11.48	1.03	10.45	8.33	2.12	4.97	2.21	0.00	10.54
Aug	0.00	0.00	0.00	10.43	2.86	7.57	0.00	7.57	0.00	4.97	0.00	4.97
Sep	0.00	0.00	0.00	5.65	0.33	5.32	0.00	5.32	0.00	0.00	0.00	0.00
Oct	41.65	24.99	16.66	0.93	0.18	0.75	0.75	0.00	7.09	0.00	17.15	0.75
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	126.35	75.81	50.54	38.42	8.12	30.30	15.29	15.01	7.09	7.18	53.43	22.47

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-76	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	19.44	11.66	7.78	0.72	0.22	0.50	0.50	0.00	7.09	0.00	11.16	0.50
May	20.83	12.50	8.33	4.19	0.84	3.35	3.35	0.00	7.09	0.00	9.14	3.35
Jun	9.72	5.83	3.89	7.48	0.93	6.55	5.83	0.72	6.37	0.72	0.00	6.55
Jul	0.00	0.00	0.00	12.04	1.17	10.87	0.00	10.87	0.00	6.37	0.00	6.37
Aug	0.00	0.00	0.00	10.14	1.94	8.20	0.00	8.20	0.00	0.00	0.00	0.00
Sep	8.33	5.00	3.33	6.00	1.74	4.26	4.26	0.00	0.73	0.00	0.00	4.26
Oct	0.00	0.00	0.00	0.80	0.04	0.77	0.00	0.77	0.00	0.73	0.00	0.73
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	58.32	34.99	23.33	41.38	6.88	34.50	13.94	20.56	0.00	7.82	20.30	21.76
Jan-77	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	1.16	0.54	0.62	0.00	0.62	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	5.45	1.01	4.44	0.00	4.44	0.00	0.00	0.00	0.00
Jun	0.00	0.00	0.00	9.91	0.29	9.62	0.00	9.62	0.00	0.00	0.00	0.00
Jul	5.55	3.33	2.22	12.67	5.75	6.92	3.33	3.59	0.00	0.00	0.00	3.33
Aug	8.33	5.00	3.33	9.94	1.27	8.67	5.00	3.67	0.00	0.00	0.00	5.00
Sep	6.94	4.16	2.78	6.53	0.04	6.50	4.16	2.34	0.00	0.00	0.00	4.16
Oct	0.00	0.00	0.00	0.72	0.01	0.71	0.00	0.71	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	20.82	12.49	8.33	46.38	8.90	37.48	12.49	24.99	0.00	0.00	0.00	12.49

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-78	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	6.94	4.16	2.78	3.02	2.43	0.59	0.59	0.00	3.57	0.00	0.00	0.59
Jun	0.00	0.00	0.00	7.85	1.36	6.48	0.00	6.48	0.00	3.57	0.00	3.57
Jul	0.00	0.00	0.00	12.28	1.17	11.11	0.00	11.11	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	9.93	0.84	9.09	0.00	9.09	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	5.57	0.01	5.56	0.00	5.56	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	0.84	0.33	0.50	0.00	0.50	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	6.94	4.16	2.78	39.48	6.15	33.33	0.59	32.74	0.00	3.57	0.00	4.16
Jan-79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	1.39	0.83	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
May	40.26	24.16	16.10	2.86	2.06	0.80	0.80	0.00	7.09	0.00	16.27	0.80
Jun	40.26	24.16	16.10	7.25	2.79	4.46	4.46	0.00	7.09	0.00	19.69	4.46
Jul	31.93	19.16	12.77	11.46	1.06	10.40	10.40	0.00	7.09	0.00	8.76	10.40
Aug	41.65	24.99	16.66	9.70	3.02	6.68	6.68	0.00	7.09	0.00	18.31	6.68
Sep	40.26	24.16	16.10	6.90	0.99	5.91	5.91	0.00	7.09	0.00	18.25	5.91
Oct	41.65	24.99	16.66	2.08	0.38	1.71	1.71	0.00	7.09	0.00	23.28	1.71
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	237.40	142.44	94.96	40.26	10.30	29.96	29.96	0.00	7.09	0.00	104.56	29.96

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.14	0.07	0.07	0.07	0.00	7.09	0.00	24.92	0.07
May	43.04	25.82	17.22	3.70	2.11	1.59	1.59	0.00	7.09	0.00	24.23	1.59
Jun	41.65	24.99	16.66	8.52	0.00	8.52	8.52	0.00	7.09	0.00	16.47	8.52
Jul	12.50	7.50	5.00	12.10	1.31	10.79	7.50	3.29	3.81	3.29	0.00	10.79
Aug	0.00	0.00	0.00	10.46	0.66	9.80	0.00	9.80	0.00	3.81	0.00	3.81
Sep	26.38	15.83	10.55	6.61	0.66	5.95	5.95	0.00	7.09	0.00	2.79	5.95
Oct	29.16	17.50	11.66	1.67	0.25	1.42	1.42	0.00	7.09	0.00	16.08	1.42
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	194.38	116.63	77.75	43.20	5.07	38.13	25.05	13.09	7.09	7.10	84.49	32.15
Jan-81	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	0.00	0.00	0.00	1.90	0.38	1.52	0.00	1.52	5.57	1.52	0.00	1.52
May	0.00	0.00	0.00	3.73	2.46	1.27	0.00	1.27	4.30	1.27	0.00	1.27
Jun	0.00	0.00	0.00	8.36	0.34	8.03	0.00	8.03	0.00	4.30	0.00	4.30
Jul	4.17	2.50	1.67	11.53	2.14	9.40	2.50	6.90	0.00	0.00	0.00	2.50
Aug	0.00	0.00	0.00	10.21	1.58	8.63	0.00	8.63	0.00	0.00	0.00	0.00
Sep	30.54	18.32	12.22	7.13	1.17	5.96	5.96	0.00	7.09	0.00	5.27	5.96
Oct	41.65	24.99	16.66	1.85	0.32	1.54	1.54	0.00	7.09	0.00	23.45	1.54
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	76.36	45.82	30.54	44.73	8.38	36.35	10.00	26.35	7.09	7.09	28.72	17.09

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-82	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
May	4.17	2.50	1.67	3.41	2.42	0.98	0.98	0.00	7.09	0.00	1.52	0.98
Jun	9.72	5.83	3.89	6.55	3.58	2.98	2.98	0.00	7.09	0.00	2.86	2.98
Jul	6.94	4.16	2.78	11.35	4.69	6.66	4.16	2.50	4.59	2.50	0.00	6.66
Aug	0.00	0.00	0.00	11.36	0.47	10.89	0.00	10.89	0.00	4.59	0.00	4.59
Sep	22.21	13.33	8.88	5.80	2.93	2.87	2.87	0.00	7.09	0.00	3.36	2.87
Oct	41.65	24.99	16.66	1.04	0.18	0.86	0.86	0.00	7.09	0.00	24.13	0.86
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	84.69	50.81	33.88	39.52	14.27	25.25	11.85	13.39	7.09	7.09	31.87	18.94
Jan-83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	0.00	0.00	0.00	0.00	0.00	7.09	0.00	24.16	0.00
May	41.65	24.99	16.66	2.49	1.31	1.18	1.18	0.00	7.09	0.00	23.81	1.18
Jun	40.26	24.16	16.10	6.63	3.03	3.60	3.60	0.00	7.09	0.00	20.55	3.60
Jul	41.65	24.99	16.66	11.89	1.75	10.15	10.15	0.00	7.09	0.00	14.84	10.15
Aug	41.65	24.99	16.66	12.00	1.16	10.84	10.84	0.00	7.09	0.00	14.15	10.84
Sep	40.26	24.16	16.10	4.71	0.14	4.57	4.57	0.00	7.09	0.00	19.59	4.57
Oct	41.65	24.99	16.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	24.99	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	287.38	172.43	114.95	37.72	7.39	30.34	30.34	0.00	7.09	0.00	142.09	30.34

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.14	0.08	0.06	0.06	0.00	7.09	0.00	24.93	0.06
May	43.04	25.82	17.22	4.90	1.43	3.46	3.46	0.00	7.09	0.00	22.36	3.46
Jun	41.65	24.99	16.66	7.57	2.08	5.49	5.49	0.00	7.09	0.00	19.50	5.49
Jul	33.32	19.99	13.33	12.41	2.18	10.23	10.23	0.00	7.09	0.00	9.76	10.23
Aug	11.11	6.67	4.44	10.91	0.61	10.30	6.67	3.63	3.46	3.63	0.00	10.30
Sep	31.93	19.16	12.77	5.05	0.65	4.40	4.40	0.00	7.09	0.00	11.12	4.40
Oct	43.04	25.82	17.22	0.00	0.00	0.00	0.00	0.00	7.09	0.00	25.82	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	245.74	147.44	98.30	40.98	7.04	33.94	30.31	3.63	7.09	3.63	113.49	33.94
Jan-85	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	1.72	0.69	1.03	1.03	0.00	7.09	0.00	23.13	1.03
May	41.65	24.99	16.66	5.50	0.89	4.61	4.61	0.00	7.09	0.00	20.38	4.61
Jun	40.26	24.16	16.10	8.51	2.61	5.90	5.90	0.00	7.09	0.00	18.25	5.90
Jul	16.66	10.00	6.66	12.15	3.81	8.35	8.35	0.00	7.09	0.00	1.65	8.35
Aug	9.72	5.83	3.89	10.39	0.19	10.20	5.83	4.37	2.72	4.37	0.00	10.20
Sep	31.93	19.16	12.77	4.59	1.04	3.55	3.55	0.00	7.09	0.00	11.24	3.55
Oct	41.65	24.99	16.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	24.99	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	222.13	133.28	88.85	42.86	9.23	33.63	29.27	4.37	7.09	4.37	99.64	33.64

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-86	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	0.84	0.31	0.53	0.53	0.00	7.09	0.00	23.63	0.53
May	41.65	24.99	16.66	4.30	1.09	3.21	3.21	0.00	7.09	0.00	21.78	3.21
Jun	37.49	22.49	15.00	8.53	1.19	7.34	7.34	0.00	7.09	0.00	15.15	7.34
Jul	9.72	5.83	3.89	11.60	1.07	10.53	5.83	4.70	2.39	4.70	0.00	10.53
Aug	0.00	0.00	0.00	10.47	1.30	9.17	0.00	9.17	0.00	2.39	0.00	2.39
Sep	37.49	22.49	15.00	5.56	0.68	4.89	4.89	0.00	7.09	0.00	10.52	4.89
Oct	41.65	24.99	16.66	0.86	0.31	0.55	0.55	0.00	7.09	0.00	24.44	0.55
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	208.26	124.96	83.30	42.17	5.95	36.22	22.35	13.87	7.09	7.09	95.52	29.44
Jan-87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	1.24	0.15	1.09	1.09	0.00	7.09	0.00	23.07	1.09
May	41.65	24.99	16.66	5.12	2.57	2.55	2.55	0.00	7.09	0.00	22.44	2.55
Jun	34.71	20.83	13.88	8.53	2.00	6.53	6.53	0.00	7.09	0.00	14.30	6.53
Jul	18.05	10.83	7.22	12.16	0.92	11.24	10.83	0.41	6.68	0.41	0.00	11.24
Aug	37.49	22.49	15.00	9.97	0.81	9.17	9.17	0.00	7.09	0.00	12.91	9.17
Sep	40.26	24.16	16.10	5.69	0.57	5.12	5.12	0.00	7.09	0.00	19.04	5.12
Oct	41.65	24.99	16.66	0.59	0.06	0.53	0.53	0.00	7.09	0.00	24.46	0.53
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	254.07	152.44	101.63	43.31	7.08	36.22	35.82	0.41	7.09	0.41	116.22	36.23

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	0.61	0.11	0.50	0.50	0.00	7.09	0.00	24.49	0.50
May	37.49	22.49	15.00	4.98	2.10	2.88	2.88	0.00	7.09	0.00	19.61	2.88
Jun	29.16	17.50	11.66	9.33	1.53	7.80	7.80	0.00	7.09	0.00	9.70	7.80
Jul	6.94	4.16	2.78	12.03	1.31	10.72	4.16	6.56	0.76	6.56	0.00	10.72
Aug	0.00	0.00	0.00	10.95	2.11	8.84	0.00	8.84	0.00	0.76	0.00	0.76
Sep	31.93	19.16	12.77	5.81	1.74	4.07	4.07	0.00	7.09	0.00	7.99	4.07
Oct	43.04	25.82	17.22	1.61	0.01	1.60	1.60	0.00	7.09	0.00	24.22	1.60
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	190.21	114.13	76.08	45.33	8.91	36.42	21.01	15.40	7.09	7.32	86.01	28.33
Jan-89	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	30.54	18.32	12.22	1.21	0.31	0.90	0.90	0.00	7.09	0.00	17.42	0.90
May	2.78	1.67	1.11	5.03	2.06	2.96	1.67	1.29	5.80	1.29	0.00	2.96
Jun	19.44	11.66	7.78	7.55	1.66	5.89	5.89	0.00	7.09	0.00	4.49	5.89
Jul	0.00	0.00	0.00	12.55	1.08	11.47	0.00	11.47	0.00	7.09	0.00	7.09
Aug	0.00	0.00	0.00	10.07	1.23	8.83	0.00	8.83	0.00	0.00	0.00	0.00
Sep	29.16	17.50	11.66	5.83	2.01	3.82	3.82	0.00	7.09	0.00	6.58	3.82
Oct	41.65	24.99	16.66	1.01	0.17	0.84	0.84	0.00	7.09	0.00	24.15	0.84
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	123.57	74.14	49.43	43.25	8.53	34.72	13.12	21.59	7.09	8.38	52.64	21.50

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-90	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	0.55	0.10	0.45	0.45	0.00	7.09	0.00	23.71	0.45
May	41.65	24.99	16.66	3.84	1.78	2.05	2.05	0.00	7.09	0.00	22.94	2.05
Jun	31.93	19.16	12.77	8.66	0.54	8.12	8.12	0.00	7.09	0.00	11.04	8.12
Jul	1.39	0.83	0.56	10.65	1.49	9.16	0.83	8.33	0.00	7.09	0.00	7.92
Aug	31.93	19.16	12.77	10.36	1.78	8.59	15.68	-7.09	7.09	0.00	3.48	15.68
Sep	19.44	11.66	7.78	7.12	1.30	5.82	5.82	0.00	7.09	0.00	5.85	5.82
Oct	41.65	24.99	16.66	1.09	0.12	0.96	0.96	0.00	7.09	0.00	24.03	0.96
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	208.25	124.95	83.30	42.27	7.12	35.15	33.91	1.24	7.09	7.09	91.05	41.00
Jan-91	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	0.71	0.15	0.57	0.57	0.00	7.09	0.00	23.59	0.57
May	19.44	11.66	7.78	4.96	1.88	3.07	3.07	0.00	7.09	0.00	8.59	3.07
Jun	31.93	19.16	12.77	8.11	3.24	4.87	4.87	0.00	7.09	0.00	14.29	4.87
Jul	2.78	1.67	1.11	11.60	1.49	10.11	1.67	8.44	0.00	7.09	0.00	8.76
Aug	0.00	0.00	0.00	10.52	2.28	8.25	0.00	8.25	0.00	0.00	0.00	0.00
Sep	26.38	15.83	10.55	5.99	0.79	5.20	5.20	0.00	7.09	0.00	3.54	5.20
Oct	41.65	24.99	16.66	1.44	0.25	1.19	1.19	0.00	7.09	0.00	23.80	1.19
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	162.44	97.46	64.98	43.33	10.08	33.26	16.57	16.69	7.09	7.09	73.81	23.66

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-92	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	38.88	23.33	15.55	2.05	0.49	1.56	1.56	0.00	7.09	0.00	21.77	1.56
May	0.00	0.00	0.00	5.34	1.42	3.92	0.00	3.92	3.17	3.92	0.00	3.92
Jun	22.21	13.33	8.88	8.04	4.87	3.17	3.17	0.00	7.09	0.00	6.23	3.17
Jul	0.00	0.00	0.00	10.83	2.07	8.76	0.00	8.76	0.00	7.09	0.00	7.09
Aug	9.72	5.83	3.89	9.10	2.55	6.55	5.83	0.72	0.00	0.00	0.00	5.83
Sep	41.65	24.99	16.66	5.55	0.00	5.55	5.55	0.00	7.09	0.00	12.35	5.55
Oct	43.04	25.82	17.22	0.53	0.02	0.51	0.51	0.00	7.09	0.00	25.31	0.51
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	155.50	93.30	62.20	41.44	11.41	30.03	16.62	13.40	7.09	11.01	65.66	27.63
Jan-93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	0.63	0.25	0.38	0.38	0.00	7.09	0.00	23.78	0.38
May	13.88	8.33	5.55	4.78	1.02	3.76	3.76	0.00	7.09	0.00	4.57	3.76
Jun	27.77	16.66	11.11	7.71	2.18	5.53	5.53	0.00	7.09	0.00	11.13	5.53
Jul	0.00	0.00	0.00	11.51	1.50	10.02	0.00	10.02	0.00	7.09	0.00	7.09
Aug	0.00	0.00	0.00	9.53	1.19	8.34	0.00	8.34	0.00	0.00	0.00	0.00
Sep	30.54	18.32	12.22	3.98	1.59	2.39	2.39	0.00	7.09	0.00	8.85	2.39
Oct	41.65	24.99	16.66	0.48	0.25	0.23	0.23	0.00	7.09	0.00	24.76	0.23
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	154.10	92.46	61.64	38.62	7.98	30.64	12.29	18.36	7.09	7.09	73.09	19.38

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-94	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	23.60	14.16	9.44	0.25	0.07	0.17	0.17	0.00	7.09	0.00	13.99	0.17
May	4.17	2.50	1.67	5.73	0.94	4.79	2.50	2.29	4.80	2.29	0.00	4.79
Jun	4.17	2.50	1.67	9.59	1.86	7.73	2.50	5.23	0.00	4.80	0.00	7.30
Jul	0.00	0.00	0.00	11.80	2.67	9.14	0.00	9.14	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	10.64	2.01	8.63	0.00	8.63	0.00	0.00	0.00	0.00
Sep	5.55	3.33	2.22	5.07	0.32	4.75	3.33	1.42	0.00	0.00	0.00	3.33
Oct	41.65	24.99	16.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	17.90	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	79.14	47.48	31.66	43.08	7.87	35.21	8.50	26.71	7.09	7.09	31.89	15.59
Jan-95	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	0.00	0.00	0.00	0.00	0.00	7.09	0.00	24.16	0.00
May	41.65	24.99	16.66	2.03	1.94	0.09	0.09	0.00	7.09	0.00	24.90	0.09
Jun	40.26	24.16	16.10	6.59	3.08	3.51	3.51	0.00	7.09	0.00	20.64	3.51
Jul	41.65	24.99	16.66	11.10	1.00	10.10	10.10	0.00	7.09	0.00	14.89	10.10
Aug	9.72	5.83	3.89	11.81	0.38	11.44	5.83	5.61	1.48	5.61	0.00	11.44
Sep	26.38	15.83	10.55	4.55	1.79	2.76	2.76	0.00	7.09	0.00	7.47	2.76
Oct	41.65	24.99	16.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	24.99	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	241.57	144.94	96.63	36.08	8.18	27.90	22.29	5.61	7.09	5.61	117.05	27.90

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-96	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	11.11	6.67	4.44	0.16	0.03	0.13	0.13	0.00	7.09	0.00	6.53	0.13
May	12.50	7.50	5.00	4.84	3.15	1.70	1.70	0.00	7.09	0.00	5.80	1.70
Jun	41.65	24.99	16.66	8.43	2.02	6.40	6.40	0.00	7.09	0.00	18.59	6.40
Jul	8.33	5.00	3.33	12.05	1.64	10.41	5.00	5.41	1.68	5.41	0.00	10.41
Aug	6.94	4.16	2.78	10.26	0.53	9.73	4.16	5.57	0.00	1.68	0.00	5.84
Sep	41.65	24.99	16.66	5.45	1.11	4.34	4.34	0.00	7.09	0.00	13.56	4.34
Oct	43.04	25.82	17.22	0.00	0.00	0.00	0.00	0.00	7.09	0.00	25.82	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	165.22	99.13	66.09	41.20	8.48	32.72	21.73	10.98	7.09	7.09	70.30	28.82
Jan-97	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	36.10	21.66	14.44	0.14	0.07	0.06	0.06	0.00	7.09	0.00	21.60	0.06
May	41.65	24.99	16.66	4.55	1.01	3.54	3.54	0.00	7.09	0.00	21.45	3.54
Jun	40.26	24.16	16.10	8.16	2.75	5.41	5.41	0.00	7.09	0.00	18.74	5.41
Jul	11.11	6.67	4.44	11.71	6.25	5.46	5.46	0.00	7.09	0.00	1.21	5.46
Aug	41.65	24.99	16.66	10.34	4.73	5.61	5.61	0.00	7.09	0.00	19.38	5.61
Sep	40.26	24.16	16.10	6.68	1.88	4.80	4.80	0.00	7.09	0.00	19.36	4.80
Oct	41.65	24.99	16.66	1.23	0.43	0.80	0.80	0.00	7.09	0.00	24.19	0.80
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	252.68	151.61	101.07	42.81	17.12	25.69	25.68	0.00	7.09	0.00	125.93	25.68

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-98	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	0.72	0.26	0.46	0.46	0.00	7.09	0.00	23.70	0.46
May	41.65	24.99	16.66	5.26	1.57	3.69	3.69	0.00	7.09	0.00	21.30	3.69
Jun	24.99	14.99	10.00	7.24	1.27	5.97	5.97	0.00	7.09	0.00	9.03	5.97
Jul	9.72	5.83	3.89	12.63	2.62	10.02	5.83	4.19	2.90	4.19	0.00	10.02
Aug	41.65	24.99	16.66	11.02	0.61	10.40	10.40	0.00	7.09	0.00	10.40	10.40
Sep	40.26	24.16	16.10	7.40	0.76	6.64	6.64	0.00	7.09	0.00	17.52	6.64
Oct	41.65	24.99	16.66	1.14	0.71	0.44	0.44	0.00	7.09	0.00	24.55	0.44
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	240.18	144.11	96.07	45.41	7.80	37.61	33.43	4.19	7.09	4.19	106.50	37.62
Jan-99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	0.20	0.20	0.00	0.00	0.00	7.09	0.00	24.16	0.00
May	41.65	24.99	16.66	4.07	1.31	2.76	2.76	0.00	7.09	0.00	22.23	2.76
Jun	40.26	24.16	16.10	7.43	2.26	5.18	5.18	0.00	7.09	0.00	18.98	5.18
Jul	13.88	8.33	5.55	12.58	1.18	11.39	8.33	3.06	4.03	3.06	0.00	11.39
Aug	41.65	24.99	16.66	10.77	2.23	8.54	8.54	0.00	7.09	0.00	13.38	8.54
Sep	40.26	24.16	16.10	5.29	2.01	3.27	3.27	0.00	7.09	0.00	20.88	3.27
Oct	41.65	24.99	16.66	0.00	0.00	0.00	0.00	0.00	7.09	0.00	24.99	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	259.61	155.77	103.84	40.34	9.20	31.14	28.08	3.06	7.09	3.06	124.62	31.14

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	41.65	24.99	16.66	1.50	0.20	1.29	1.29	0.00	7.09	0.00	23.70	1.29
May	15.27	9.16	6.11	5.96	1.11	4.84	4.84	0.00	7.09	0.00	4.32	4.84
Jun	2.78	1.67	1.11	8.82	1.10	7.73	1.67	6.06	1.03	6.06	0.00	7.73
Jul	1.39	0.83	0.56	13.51	0.76	12.75	0.83	11.92	0.00	1.03	0.00	1.86
Aug	0.00	0.00	0.00	11.40	1.61	9.78	0.00	9.78	0.00	0.00	0.00	0.00
Sep	27.77	16.66	11.11	4.95	1.79	3.16	3.16	0.00	7.09	0.00	6.41	3.16
Oct	43.04	25.82	17.22	0.00	0.00	0.00	0.00	0.00	7.09	0.00	25.82	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	131.90	79.14	52.76	46.13	6.57	39.56	11.79	27.76	7.09	7.09	60.25	18.88
Jan-01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	40.26	24.16	16.10	0.62	0.26	0.36	0.36	0.00	7.09	0.00	23.79	0.36
May	33.32	19.99	13.33	4.71	2.64	2.07	2.07	0.00	7.09	0.00	17.92	2.07
Jun	22.21	13.33	8.88	8.77	0.39	8.39	8.39	0.00	7.09	0.00	4.94	8.39
Jul	6.94	4.16	2.78	13.20	1.06	12.15	4.16	7.99	0.00	7.09	0.00	11.25
Aug	0.00	0.00	0.00	11.31	1.19	10.12	0.00	10.12	0.00	0.00	0.00	0.00
Sep	29.16	17.50	11.66	6.78	0.84	5.94	5.94	0.00	7.09	0.00	4.47	5.94
Oct	41.65	24.99	16.66	0.48	0.02	0.46	0.46	0.00	7.09	0.00	24.53	0.46
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	173.54	104.12	69.42	45.88	6.40	39.48	21.38	18.11	7.09	7.09	75.65	28.47

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	22.21	13.33	8.88	0.78	0.03	0.75	0.75	0.00	7.09	0.00	12.58	0.75
May	2.78	1.67	1.11	4.46	1.55	2.92	1.67	1.25	5.84	1.25	0.00	2.92
Jun	0.00	0.00	0.00	9.59	0.80	8.79	0.00	8.79	0.00	5.84	0.00	5.84
Jul	0.00	0.00	0.00	13.81	0.00	13.81	0.00	13.81	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	10.82	0.70	10.11	0.00	10.11	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	6.50	1.35	5.15	0.00	5.15	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	0.83	0.24	0.60	0.00	0.60	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	24.99	14.99	10.00	46.79	4.66	42.13	2.42	39.71	0.00	7.09	12.58	9.51
Jan-03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Apr	0.00	0.00	0.00	1.29	0.69	0.60	0.00	0.60	0.00	0.00	0.00	0.00
May	0.00	0.00	0.00	5.12	1.91	3.21	0.00	3.21	0.00	0.00	0.00	0.00
Jun	23.60	14.16	9.44	7.46	1.10	6.36	6.36	0.00	7.09	0.00	3.04	6.36
Jul	0.00	0.00	0.00	14.24	0.42	13.82	0.00	13.82	0.00	7.09	0.00	7.09
Aug	0.00	0.00	0.00	11.61	3.46	8.14	0.00	8.14	0.00	0.00	0.00	0.00
Sep	16.66	10.00	6.66	5.59	0.21	5.38	5.38	0.00	4.61	0.00	0.00	5.38
Oct	26.38	15.83	10.55	0.93	0.02	0.91	0.91	0.00	7.09	0.00	12.48	0.91
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	66.64	39.98	26.66	46.25	7.83	38.42	12.65	25.77	7.09	7.09	15.52	19.74

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
May	0.00	0.00	0.00	5.63	1.37	4.26	0.00	4.26	2.83	4.26	0.00	4.26
Jun	0.00	0.00	0.00	7.63	2.44	5.19	0.00	5.19	0.00	2.83	0.00	2.83
Jul	0.00	0.00	0.00	11.71	2.20	9.51	0.00	9.51	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	9.54	3.12	6.42	0.00	6.42	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	6.18	2.36	3.82	0.00	3.82	0.00	0.00	0.00	0.00
Oct	8.33	5.00	3.33	1.46	0.39	1.07	1.07	0.00	4.37	0.00	0.00	1.07
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.37	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.37	0.00	0.00	0.00
Year Total	8.33	5.00	3.33	42.15	11.87	30.28	1.07	29.20	4.37	7.09	0.00	8.16
Jan-05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.37	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.37	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	4.37	0.00	0.00	0.00
Apr	34.71	20.83	13.88	0.08	0.03	0.04	0.04	0.00	7.09	0.00	19.86	0.04
May	9.72	5.83	3.89	4.65	2.17	2.48	2.48	0.00	7.09	0.00	3.35	2.48
Jun	31.93	19.16	12.77	8.05	3.13	4.92	4.92	0.00	7.09	0.00	14.24	4.92
Jul	0.00	0.00	0.00	13.45	0.33	13.13	0.00	13.13	0.00	7.09	0.00	7.09
Aug	1.39	0.83	0.56	10.70	1.15	9.55	0.83	8.72	0.00	0.00	0.00	0.83
Sep	0.00	0.00	0.00	6.80	0.18	6.62	0.00	6.62	0.00	0.00	0.00	0.00
Oct	29.16	17.50	11.66	1.56	1.04	0.53	0.53	0.00	7.09	0.00	9.88	0.53
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Year Total	106.91	64.15	42.76	45.29	8.03	37.27	8.80	28.47	7.09	7.09	47.33	15.89

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Month	**Farm Surf. Water Supply**	**Surf. Water Avail. for CU**	**Surf. Water DP & Runoff**	**Crop CU**	**Eff. Rainfall to CU**	**NWR**	**HCU from Surf. Water**	**NWR not met by Surface Water**	**Soil Moist. Res.**	**HCU from Soil Moist.**	**Net DP & Runoff**	**Total HCU**
Jan-06	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Feb	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Mar	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	7.09	0.00	0.00	0.00
Apr	12.50	7.50	5.00	0.69	0.02	0.67	0.67	0.00	7.09	0.00	6.83	0.67
May	0.00	0.00	0.00	5.73	0.80	4.92	0.00	4.92	2.17	4.92	0.00	4.92
Jun	0.00	0.00	0.00	10.43	0.03	10.40	0.00	10.40	0.00	2.17	0.00	2.17
Jul	0.00	0.00	0.00	13.67	1.01	12.65	0.00	12.65	0.00	0.00	0.00	0.00
Aug	0.00	0.00	0.00	11.12	0.75	10.37	0.00	10.37	0.00	0.00	0.00	0.00
Sep	0.00	0.00	0.00	4.84	0.57	4.27	0.00	4.27	0.00	0.00	0.00	0.00
Oct	0.00	0.00	0.00	0.87	0.46	0.41	0.00	0.41	0.00	0.00	0.00	0.00
Nov	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Dec	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Year Total	12.50	7.50	5.00	47.34	3.64	43.69	0.67	43.02	0.00	7.09	6.83	7.76

AIV.8. Osborn Farm Historic Consumptive Use Summary Table 1950-2006 – East Field

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1950	0.00	0.00	0.00	0.00	0.98	5.80	8.20	8.50	4.02	0.39	0.00	0.00	27.89
1951	0.00	0.00	0.00	0.00	2.03	4.08	9.57	3.19	3.53	0.23	0.00	0.00	22.63
1952	0.00	0.00	0.00	0.23	1.68	6.25	10.33	9.22	6.29	0.43	0.00	0.00	34.43
1953	0.00	0.00	0.00	0.00	1.64	5.35	9.92	9.42	5.96	0.57	0.00	0.00	32.86
1954	0.00	0.00	0.00	0.00	3.33	3.76	0.00	0.00	0.00	0.84	0.00	0.00	7.93
1955	0.00	0.00	0.00	0.22	3.38	4.58	2.51	9.16	4.36	0.65	0.00	0.00	24.86
1956	0.00	0.00	0.00	0.20	4.04	0.00	0.00	5.83	0.00	0.00	0.00	0.00	10.07
1957	0.00	0.00	0.00	0.00	0.49	6.24	11.25	7.49	3.76	0.00	0.00	0.00	29.23
1958	0.00	0.00	0.00	0.05	1.57	6.12	8.94	10.11	5.95	0.12	0.00	0.00	32.86
1959	0.00	0.00	0.00	0.00	1.57	7.91	10.42	0.00	0.83	0.07	0.00	0.00	20.80
1960	0.00	0.00	0.00	0.00	2.33	7.36	10.75	7.92	0.00	0.63	0.00	0.00	28.99
1961	0.00	0.00	0.00	0.16	0.52	5.89	7.05	6.76	1.41	0.00	0.00	0.00	21.79
1962	0.00	0.00	0.00	0.00	2.93	5.52	7.09	0.00	0.00	0.00	0.00	0.00	15.54
1963	0.00	0.00	0.00	0.00	0.00	4.90	7.09	0.00	4.85	1.79	0.03	0.00	18.66
1964	0.00	0.00	0.00	0.24	3.24	3.58	0.00	0.00	0.00	0.00	0.00	0.00	7.06
1965	0.00	0.00	0.00	0.00	0.00	0.00	9.35	9.14	1.66	0.00	0.00	0.00	20.15
1966	0.00	0.00	0.00	0.00	3.25	5.92	8.76	0.00	5.12	0.30	0.00	0.00	23.35
1967	0.00	0.00	0.00	0.22	0.89	3.19	7.26	7.92	5.23	1.81	0.00	0.00	26.52
1968	0.00	0.00	0.00	0.00	1.46	6.97	7.09	0.00	0.00	0.96	0.00	0.00	16.48
1969	0.00	0.00	0.00	0.19	1.98	4.35	11.53	7.92	5.44	0.00	0.00	0.00	31.41
1970	0.00	0.00	0.00	0.05	2.47	5.34	9.09	2.16	3.55	0.24	0.00	0.00	22.90
1971	0.00	0.00	0.00	0.05	2.22	8.23	7.09	0.00	1.59	0.00	0.00	0.00	19.18
1972	0.00	0.00	0.00	0.00	3.97	6.93	7.09	0.00	5.46	1.45	0.00	0.00	24.90
1973	0.00	0.00	0.00	0.20	2.90	7.78	8.25	10.98	3.80	1.29	0.00	0.00	35.20
1974	0.00	0.00	0.00	0.51	5.50	5.82	9.59	9.16	3.09	0.82	0.00	0.00	34.49
1975	0.00	0.00	0.00	0.00	0.96	5.25	10.54	4.97	0.00	0.75	0.00	0.00	22.47
1976	0.00	0.00	0.00	0.50	3.35	6.55	6.37	0.00	4.26	0.73	0.00	0.00	21.76
1977	0.00	0.00	0.00	0.00	0.00	0.00	3.33	5.00	4.16	0.00	0.00	0.00	12.49
1978	0.00	0.00	0.00	0.00	0.59	3.57	0.00	0.00	0.00	0.00	0.00	0.00	4.16
1979	0.00	0.00	0.00	0.00	0.80	4.46	10.40	6.68	5.91	1.71	0.00	0.00	29.96
1980	0.00	0.00	0.00	0.07	1.59	8.52	10.79	3.81	5.95	1.42	0.00	0.00	32.15
1981	0.00	0.00	0.00	1.52	1.27	4.30	2.50	0.00	5.96	1.54	0.00	0.00	17.09
1982	0.00	0.00	0.00	0.00	0.98	2.98	6.66	4.59	2.87	0.86	0.00	0.00	18.94
1983	0.00	0.00	0.00	0.00	1.18	3.60	10.15	10.84	4.57	0.00	0.00	0.00	30.34
1984	0.00	0.00	0.00	0.06	3.46	5.49	10.23	10.30	4.40	0.00	0.00	0.00	33.94
1985	0.00	0.00	0.00	1.03	4.61	5.90	8.35	10.20	3.55	0.00	0.00	0.00	33.64

AIV.8. Osborn Farm Historic Consumptive Use Summary Table 1950-2006 – East Field

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1986	0.00	0.00	0.00	0.53	3.21	7.34	10.53	2.39	4.89	0.55	0.00	0.00	29.44
1987	0.00	0.00	0.00	1.09	2.55	6.53	11.24	9.17	5.12	0.53	0.00	0.00	36.23
1988	0.00	0.00	0.00	0.50	2.88	7.80	10.72	0.76	4.07	1.60	0.00	0.00	28.33
1989	0.00	0.00	0.00	0.90	2.96	5.89	7.09	0.00	3.82	0.84	0.00	0.00	21.50
1990	0.00	0.00	0.00	0.45	2.05	8.12	7.92	15.68	5.82	0.96	0.00	0.00	41.00
1991	0.00	0.00	0.00	0.57	3.07	4.87	8.76	0.00	5.20	1.19	0.00	0.00	23.66
1992	0.00	0.00	0.00	1.56	3.92	3.17	7.09	5.83	5.55	0.51	0.00	0.00	27.63
1993	0.00	0.00	0.00	0.38	3.76	5.53	7.09	0.00	2.39	0.23	0.00	0.00	19.38
1994	0.00	0.00	0.00	0.17	4.79	7.30	0.00	0.00	3.33	0.00	0.00	0.00	15.59
1995	0.00	0.00	0.00	0.00	0.09	3.51	10.10	11.44	2.76	0.00	0.00	0.00	27.90
1996	0.00	0.00	0.00	0.13	1.70	6.40	10.41	5.84	4.34	0.00	0.00	0.00	28.82
1997	0.00	0.00	0.00	0.06	3.54	5.41	5.46	5.61	4.80	0.80	0.00	0.00	25.68
1998	0.00	0.00	0.00	0.46	3.69	5.97	10.02	10.40	6.64	0.44	0.00	0.00	37.62
1999	0.00	0.00	0.00	0.00	2.76	5.18	11.39	8.54	3.27	0.00	0.00	0.00	31.14
2000	0.00	0.00	0.00	1.29	4.84	7.73	1.86	0.00	3.16	0.00	0.00	0.00	18.88
2001	0.00	0.00	0.00	0.36	2.07	8.39	11.25	0.00	5.94	0.46	0.00	0.00	28.47
2002	0.00	0.00	0.00	0.75	2.92	5.84	0.00	0.00	0.00	0.00	0.00	0.00	9.51
2003	0.00	0.00	0.00	0.00	0.00	6.36	7.09	0.00	5.38	0.91	0.00	0.00	19.74
2004	0.00	0.00	0.00	0.00	4.26	2.83	0.00	0.00	0.00	1.07	0.00	0.00	8.16
2005	0.00	0.00	0.00	0.04	2.48	4.92	7.09	0.83	0.00	0.53	0.00	0.00	15.89
2006	0.00	0.00	0.00	0.67	4.92	2.17	0.00	0.00	0.00	0.00	0.00	0.00	7.76
Averag	**0.00**	**0.00**	**0.00**	**0.27**	**2.38**	**5.33**	**7.24**	**4.52**	**3.40**	**0.53**	**0.00**	**0.00**	**23.67**

AIV.9. Osborn Farm Historic Net Deep Percolation and Runoff Summary Table 1950-2006 – East Field.

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1950	0.00	0.00	0.00	19.16	1.52	0.00	12.66	17.33	12.64	17.93	0.00	0.00	81.23
1951	0.00	0.00	0.00	24.99	2.97	0.00	2.17	7.64	18.13	25.59	0.00	0.00	81.49
1952	0.00	0.00	0.00	24.76	19.15	9.57	15.50	11.61	0.00	0.00	0.00	0.00	80.59
1953	0.00	0.00	0.00	23.18	6.68	0.00	4.72	0.00	4.84	0.00	0.00	0.00	39.42
1954	0.00	0.00	0.00	2.50	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.50
1955	0.00	0.00	0.00	8.85	6.62	0.00	0.00	0.00	13.54	6.02	0.00	0.00	35.02
1956	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1957	0.00	0.00	0.00	23.60	25.33	18.75	14.57	18.33	21.23	25.82	0.00	0.00	147.64
1958	0.00	0.00	0.00	24.94	24.26	18.87	0.22	15.71	19.04	25.70	0.00	0.00	128.74
1959	0.00	0.00	0.00	24.99	24.26	2.09	0.00	0.00	0.00	19.72	0.00	0.00	71.06
1960	0.00	0.00	0.00	20.83	21.00	12.64	15.08	0.00	0.00	3.95	0.00	0.00	73.48
1961	0.00	0.00	0.00	23.99	15.31	14.93	14.61	17.40	9.42	25.82	0.00	0.00	121.49
1962	0.00	0.00	0.00	19.16	19.56	16.14	0.00	0.00	0.00	0.00	0.00	0.00	54.86
1963	0.00	0.00	0.00	0.00	0.00	1.39	0.00	0.00	0.00	13.76	0.00	0.00	15.15
1964	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1965	0.00	0.00	0.00	0.00	0.00	0.00	0.60	4.19	23.33	25.82	0.00	0.00	53.94
1966	0.00	0.00	0.00	24.99	22.58	19.07	0.00	0.00	6.11	8.86	0.00	0.00	81.62
1967	0.00	0.00	0.00	0.00	0.56	21.80	16.07	0.00	13.38	24.01	0.00	0.00	75.82
1968	0.00	0.00	0.00	24.99	10.20	4.70	0.00	0.00	0.00	5.28	0.00	0.00	45.17
1969	0.00	0.00	0.00	17.31	18.01	20.64	7.62	0.00	0.00	24.44	0.00	0.00	88.02
1970	0.00	0.00	0.00	24.94	21.69	19.65	0.00	0.00	2.68	25.58	0.00	0.00	94.53
1971	0.00	0.00	0.00	24.94	23.60	15.09	0.00	0.00	1.32	25.82	0.00	0.00	90.78
1972	0.00	0.00	0.00	16.66	2.70	4.73	0.00	0.00	11.61	24.37	0.00	0.00	60.08
1973	0.00	0.00	0.00	24.79	22.92	17.21	0.08	14.84	21.19	24.54	0.00	0.00	125.58
1974	0.00	0.00	0.00	23.65	0.33	12.51	0.00	0.54	19.41	24.17	0.00	0.00	80.60
1975	0.00	0.00	0.00	17.50	1.54	17.24	0.00	0.00	0.00	17.15	0.00	0.00	53.44
1976	0.00	0.00	0.00	11.16	9.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.31
1977	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1978	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
1979	0.00	0.00	0.00	0.00	22.20	19.69	8.76	18.31	18.25	23.28	0.00	0.00	110.49
1980	0.00	0.00	0.00	24.92	24.23	16.47	0.00	0.00	2.79	16.08	0.00	0.00	84.50
1981	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.27	23.45	0.00	0.00	28.72
1982	0.00	0.00	0.00	0.00	1.52	2.86	0.00	0.00	3.36	24.13	0.00	0.00	31.87
1983	0.00	0.00	0.00	24.16	23.81	20.55	14.84	14.15	19.59	24.99	0.00	0.00	142.09
1984	0.00	0.00	0.00	24.93	22.36	19.50	9.76	0.00	11.12	25.82	0.00	0.00	113.51
1985	0.00	0.00	0.00	23.13	20.38	18.25	1.65	0.00	11.24	24.99	0.00	0.00	99.64
1986	0.00	0.00	0.00	23.63	21.78	15.15	0.00	0.00	10.52	24.44	0.00	0.00	95.51
1987	0.00	0.00	0.00	23.07	22.44	14.30	0.00	12.91	19.04	24.46	0.00	0.00	116.22
1988	0.00	0.00	0.00	24.49	19.61	9.70	0.00	0.00	7.99	24.22	0.00	0.00	86.01

AIV.9. Osborn Farm Historic Net Deep Percolation and Runoff Summary Table 1950-2006 – East Field.

	January	February	March	April	May	June	July	August	September	October	November	December	Totals
1989	0.00	0.00	0.00	17.42	0.00	4.49	0.00	0.00	6.58	24.15	0.00	0.00	52.64
1990	0.00	0.00	0.00	23.71	22.94	11.04	0.00	3.48	5.85	24.03	0.00	0.00	91.03
1991	0.00	0.00	0.00	23.59	8.59	14.29	0.00	0.00	3.54	23.80	0.00	0.00	73.81
1992	0.00	0.00	0.00	21.77	0.00	6.23	0.00	0.00	12.35	25.31	0.00	0.00	65.66
1993	0.00	0.00	0.00	23.78	4.57	11.13	0.00	0.00	8.85	24.76	0.00	0.00	73.09
1994	0.00	0.00	0.00	13.99	0.00	0.00	0.00	0.00	0.00	19.25	0.00	0.00	33.24
1995	0.00	0.00	0.00	24.16	24.90	20.64	14.89	0.00	7.47	24.99	0.00	0.00	117.04
1996	0.00	0.00	0.00	6.53	5.80	18.59	0.00	0.00	13.56	25.82	0.00	0.00	70.31
1997	0.00	0.00	0.00	21.60	21.45	18.74	1.21	19.38	19.36	24.19	0.00	0.00	125.92
1998	0.00	0.00	0.00	23.70	21.30	9.03	0.00	10.40	17.52	24.55	0.00	0.00	106.50
1999	0.00	0.00	0.00	24.16	22.23	18.98	0.00	13.38	20.88	24.99	0.00	0.00	124.63
2000	0.00	0.00	0.00	23.70	4.32	0.00	0.00	0.00	6.41	25.82	0.00	0.00	60.24
2001	0.00	0.00	0.00	23.79	17.92	4.94	0.00	0.00	4.47	24.53	0.00	0.00	75.66
2002	0.00	0.00	0.00	12.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	12.58
2003	0.00	0.00	0.00	0.00	0.00	3.04	0.00	0.00	0.00	12.48	0.00	0.00	15.52
2004	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2005	0.00	0.00	0.00	19.86	3.35	14.24	0.00	0.00	0.00	9.88	0.00	0.00	47.32
2006	0.00	0.00	0.00	6.83	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	6.83
	0.00	**0.00**	**0.00**	**16.34**	**11.15**	**9.45**	**2.72**	**3.50**	**7.61**	**17.00**	**0.00**	**0.00**	**67.77**

	Average HCU for West Field 8.25 acres	Average HCU for East Field 19.88 acres	Total Average HCU 28.13 acres
	[acre-ft.]	[acre-ft.]	[acre-ft.]
Jan	0.00	0.00	0.00
Feb	0.00	0.00	0.00
Mar	0.00	0.00	0.00
Apr	0.27	0.27	0.54
May	1.19	2.38	3.57
Jun	2.14	5.33	7.47
Jul	2.26	7.24	9.49
Aug	1.45	4.52	5.97
Sep	1.35	3.40	4.75
Oct	0.67	0.53	1.20
Nov	0.02	0.00	0.02
Dec	0.00	0.00	0.00
	9.34	23.67	33.02

AIV.11. Osborn Farm Total Return Flow Obligation Worksheet.

	(1)	(2)	(3)	(4)	(5)
	Average Total Deep Percolation and Runoff Return Flows	**Average Unlagged Deep Percolation Return Flow**	**Average Lagged Deep Percolation Return Flow**	**Average Surface Return Flows**	**Total Return Flow Obligation**
	[acre-ft.]	[acre-ft.]	[acre-ft.]	[acre-ft.]	[acre-ft.]
Jan	0.00	0.00	0.54	0.00	0.54
Feb	0.00	0.00	0.32	0.00	0.32
Mar	0.00	0.00	0.19	0.00	0.19
Apr	24.90	4.98	2.35	19.92	22.27
May	17.04	3.41	2.99	13.63	16.62
Jun	14.84	2.97	2.87	11.87	14.74
Jul	4.77	0.95	1.98	3.82	5.80
Aug	5.94	1.19	1.56	4.75	6.31
Sep	13.06	2.61	2.06	10.45	12.51
Oct	25.95	5.19	3.52	20.76	24.28
Nov	0.00	0.00	2.02	0.00	2.02
Dec	0.00	0.00	0.91	0.00	0.91
	106.50	21.30	21.30	85.20	106.50

Notes:

(1) = Bottom Row of AIV.6 + Bottom Row of AIV.9

(2) = Column (1) *0.2 (Assumes 20% is Deep Percolation)

(3) = Column (2) Lagged using IDS AWAS (see AIV.12)

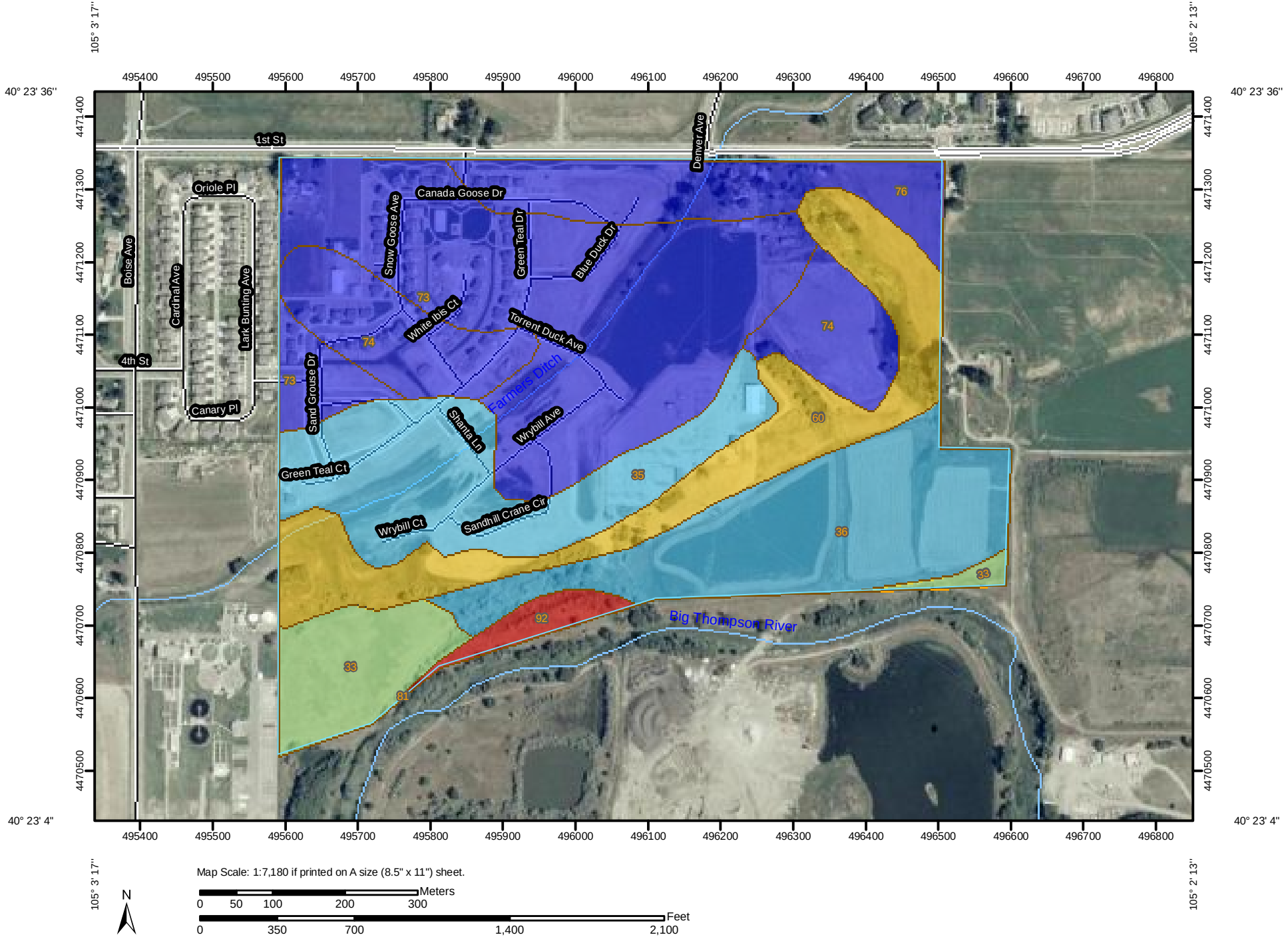
(4) = Column (1) *0.8

(5) = Column (3) + Column (4)

Boundary Condition	Dist. To Alluvial Boundary	Transmissivity	Specific Yield	X to Well
	[ft.]	[g.p.d./ft.]	[nd]	[ft.]
Alluvial Aquifer	1,400	20,000.00	0.2	421

Time	Dep. Rate	Vol. of Dep.	Vol. of Dep. This Step
[month]	[c.f.s.]	[acre-ft.]	[acre-ft.]
1	0.00	0.00	0.00
2	0.00	0.00	0.00
3	0.00	0.00	0.00
4	0.05	2.23	2.23
5	0.05	5.15	2.92
6	0.05	7.98	2.83
7	0.03	9.93	1.96
8	0.02	11.47	1.54
9	0.04	13.52	2.05
10	0.07	17.04	3.51
11	0.02	19.05	2.01
12	0.01	19.95	0.90
13	0.01	20.49	0.54
14	0.00	20.82	0.32
15	0.00	21.01	0.19
16	0.06	23.36	2.35
17	0.05	26.34	2.99
18	0.05	29.21	2.87
19	0.03	31.20	1.98
20	0.02	32.75	1.56
21	0.04	34.81	2.06
22	0.07	38.33	3.52
23	0.02	40.34	2.02
24	0.01	41.25	0.91
25	0.01	41.79	0.54
26	0.00	42.12	0.32
27	0.00	42.31	0.19
28	0.06	44.66	2.35
29	0.05	47.64	2.99
30	0.05	50.51	2.87
31	0.03	52.50	1.98
32	0.02	54.05	1.56
33	0.04	56.11	2.06
34	0.07	59.63	3.52
35	0.02	61.64	2.02
36	0.01	62.55	0.91

Available Water Capacity—Larimer County Area, Colorado
(GARDELS FARM)



MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Soil Ratings
- <= 0.03
- > 0.03 AND <= 0.07
- > 0.07 AND <= 0.12
- > 0.12 AND <= 0.16
- > 0.16 AND <= 0.19
- Not rated or not available

Political Features
- Cities

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:7,180 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 13N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Larimer County Area, Colorado
Survey Area Data: Version 7, May 1, 2009

Date(s) aerial images were photographed: 8/6/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Available Water Capacity

Available Water Capacity— Summary by Map Unit — Larimer County Area, Colorado				
Map unit symbol	**Map unit name**	**Rating (centimeters per centimeter)**	**Acres in AOI**	**Percent of AOI**
33	Fluvaquents, nearly level	0.12	9.6	6.3%
35	Fort Collins loam, 1 to 3 percent slopes	0.16	21.4	14.0%
36	Fort Collins loam, 3 to 5 percent slopes	0.16	24.2	15.9%
60	Larim gravelly sandy loam, 5 to 40 percent slopes	0.07	21.5	14.1%
73	Nunn clay loam, 0 to 1 percent slope	0.19	44.8	29.4%
74	Nunn clay loam, 1 to 3 percent slopes	0.19	15.8	10.3%
76	Nunn clay loam, wet, 1 to 3 percent slopes	0.18	12.8	8.4%
81	Paoli fine sandy loam, 0 to 1 percent slopes	0.16	0.0	0.0%
92	Riverwash	0.03	2.5	1.6%
Totals for Area of Interest			**152.5**	**100.0%**

Description

Available water capacity (AWC) refers to the quantity of water that the soil is capable of storing for use by plants. The capacity for water storage is given in centimeters of water per centimeter of soil for each soil layer. The capacity varies, depending on soil properties that affect retention of water. The most important properties are the content of organic matter, soil texture, bulk density, and soil structure, with corrections for salinity and rock fragments. Available water capacity is an important factor in the choice of plants or crops to be grown and in the design and management of irrigation systems. It is not an estimate of the quantity of water actually available to plants at any given time.

Available water supply (AWS) is computed as AWC times the thickness of the soil. For example, if AWC is 0.15 cm/cm, the available water supply for 25 centimeters of soil would be 0.15 x 25, or 3.75 centimeters of water.

For each soil layer, AWC is recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

Rating Options

Units of Measure: centimeters per centimeter

Aggregation Method: Dominant Component

Component Percent Cutoff: *None Specified*

Tie-break Rule: Higher

Interpret Nulls as Zero: No

Layer Options: Surface Layer

APPENDIX V

Recorded at 2 35 o'clock P M. NOV 20 1944 BOOK 1144 PAGE 241

Reception No. 946382 ANN SPOMER Recorder.

THIS DEED, Made this 17th day of November in the year of our Lord one thousand nine hundred and forty-four between Edith Marie Eckman

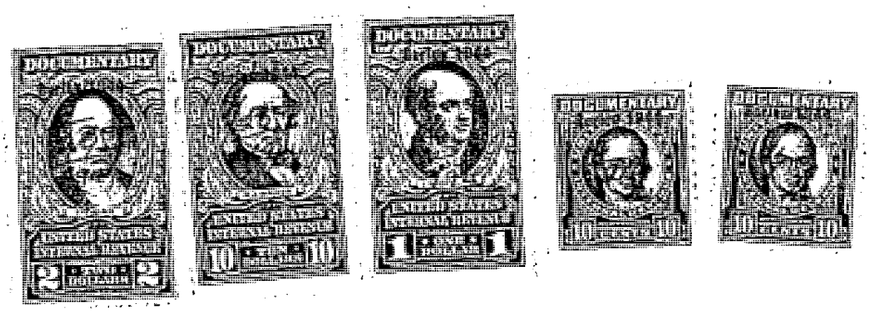
of the City and County of Denver and State of Colorado, of the first part, and Conrad Pfeif and Anna Marie Pfeif

of the County of Larimer and State of Colorado, of the second part:

WITNESSETH, That the said party of the first part, for and in consideration of the sum of Ten Dollars and other valuable considerations ~~DOLLARS~~

to the said party of the first part in hand paid by the said parties of the second part, the receipt whereof is hereby confessed and acknowledged, has granted, bargained, sold and conveyed, and by these presents do es grant, bargain, sell, convey and confirm unto the said parties of the second part, not in tenancy in common but in joint tenancy, the survivor of them, their assigns and the heirs and assigns of such survivor forever, all the following described lot or parcel of land, situate, lying and being in the County of Weld and State of Colorado, to-wit:

The Northwest Quarter (NW¼) and the North One-half (N½) of the Southwest Quarter (SW¼) of Section Twenty-nine (29), Township Five (5) North, Range Sixty-seven (67) West of the Sixth Principal Meridian, together with twenty-six (26) shares of the capital stock of the Hill and Brush Ditch Company, the Adams Seepage Ditch, and all other water, ditch and lateral rights appertaining to said premises. Excepting from the above described premises rights of way for roads and ditches as now constructed, and excepting a tract containing one acre in the Northeast corner of the Northwest Quarter (NW¼) of said Section Twenty-nine (29) heretofore conveyed to School District Number 7 of Weld County, Colorado, and except that part of the above described premises heretofore conveyed to the Union Pacific Railway Company by deed recorded in Book 316 at Page 53, Weld County, Colorado, records.



TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever of the said party of the first part, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances.

No. 768. WARRANTY DEED.—To Joint Tenants.—The Bradford-Robinson Ptg. Co., Mfrs. Robinson's Legal Blanks, Denver.

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the said parties of the second part, the survivor of them, their assigns, and the heirs and assigns of such survivor forever. And the said part y of the first part, for herself, her heirs, executors, and administrators, do es covenant, grant, bargain and agree to and with the said parties of the second part, the survivor of them, their assigns and the heirs and assigns of such survivor, that at the time of the ensealing and delivery of these presents, she is well seized of the premises above conveyed, as of good, sure, perfect, absolute and indefeasible estate of inheritance, in law, in fee simple, and ha s good right, full power and lawful authority to grant, bargain, sell and convey the same in manner and form aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments and incumbrances of whatever kind or nature soever, except subject to the 1944 taxes;

and the above bargained premises in the quiet and peaceable possession of the said parties of the second part, the survivor of them, their assigns and the heirs and assigns of such survivor, against all and every person or persons lawfully claiming or to claim the whole or any part thereof, the said part y of the first part shall and will WARRANT AND FOREVER DEFEND.

IN WITNESS WHEREOF, the said part y of the first part ha s hereunto set her hand and seal the day and year first above written.

Signed, Sealed and Delivered in the Presence of

Edith Marie Eckman [SEAL]

.....[SEAL]

.....[SEAL]

STATE OF COLORADO,
County of Larimer. } ss.

The foregoing instrument was acknowledged before me this 17th day of November A. D. 19 44, by* Edith Marie Eckman.

My commission expires March 28, 19 48 Witness my hand and official seal

Geraldine Conaby
Notary Public.

*If by natural person or persons here insert name or names; if by persons acting in representative or official capacity or as attorney-in-fact, then insert name of person as executor, attorney-in-fact or other capacity or description; if by officer of corporation, then insert name of such officer or officers, as the president or other officers of such corporation, naming it.

1M-090 67015 NOV 20 '44

No. 96382

WARRANTY DEED
JOINT TENANTS

Edith Marie Eckman

TO

Conrad Pfeif and Anna Marie Pfeif

STATE OF COLORADO,
County of Weld } ss.

I hereby certify that this instrument was filed for record in my office this NOV 20 1944, A. D. 19..... day of ..... at 2:35 o'clock P M., and duly recorded in Book 1144 Page 240

Recorder.

By Bessie Mercer Deputy.

Fees, $ .90

Return to:
Hatfield Chilson
Loveland, Colorado

10-41 THE BRADFORD-ROBINSON PTG. CO., DENVER

BOOK 1551 PAGE 288 Recorded FEB 18 1960 at 3:40 O'clock P M.

Reception 1323421 Ann Spomer, Recorder

REAL ESTATE CONVEYANCE CERTIFICATE # 2624 FEB 18 1960 ANN SPOMER, DEPUTY

WARRANTY DEED IN JOINT TENANCY

KNOW ALL MEN BY THESE PRESENTS, That Conrad Pfeif, of the County of Larimer and State of Colorado, for the consideration of Ten Dollars and other valuable considerations in hand paid, hereby sells and conveys to Joseph Pfeif and Olinda E. Pfeif, of the County of Weld and State of Colorado, to pass to the said Joseph Pfeif and Olinda E. Pfeif, not in tenancy in common but in joint tenancy, the survivor of them, their assigns, and the heirs and assigns of such survivor, the following real estate and property, situate in the County of Weld and State of Colorado, to-wit:

The Northwest Quarter (NW 1/4) and the North Half of the Southwest Quarter (N 1/2 SW 1/4) of Section Twenty-nine (29), Township Five (5) North, Range Sixty-seven (67) West of the Sixth Principal Meridian, excepting therefrom that certain tract of land containing approximately 41.3 acres conveyed to Henry Jacob Betz and Katherina Betz by Warranty Deed recorded in Book 1291 at page 231 of the Weld County records which said tract is more particularly described as follows: Beginning at the southwest corner of the North Half of the Southwest Quarter (N 1/2 SW 1/4) of said Section Twenty-nine (29), thence north 01° east along the west line of said Section Twenty-nine (29) 1136.3 feet, thence north 62° 31' East 652.3 feet; thence north 87° 12' east 378.6 feet; thence south 82° 25' east 132.1 feet; thence south 22° 23' east 580 feet; thence south 21° 21' west 264.6 feet; thence south 31° 21' east 547.3 feet; thence south 00° 01' west 196.3 feet; thence north 89° 41' west 1514.4 feet to the point of beginning, together with 26 shares of the capital stock of the Hill and Brush Ditch Company, the Adams Seepage Ditch, and all other water, ditch and lateral rights appertaining to said premises, excepting that part of the above described premises heretofore conveyed to the Union Pacific Railway Company by deed recorded in Book 316 at page 53 of the Weld County records,

together with all its appurtenances, and warrants the title to the same, subject, however, to the following:

1. 1959 taxes due and payable in 1960.
2. Rights of way for roads, ditches and power lines and other easements as granted or reserved by instruments of record or as now existing upon the premises.
3. Inclusion within the Northern Colorado Water Conservancy District and any existing fire protection districts or soil conservation districts.

Signed and delivered this 17th day of February, 1960.

Conrad Pfeif

Conrad Pfeif

STATE OF COLORADO)
COUNTY OF WELD) SS

The foregoing instrument was acknowledged before me this 17th day of February, 1960 by Conrad Pfeif.

WITNESS my hand and official seal.

My commission expires: My Commission expires September 14, 1963

Robert E. Ruyle

Notary Public

ROBERT RUYLE NOTARY PUBLIC STATE OF COLORADO

FEB-18-60 00281 B 1.60

BOOK 927

Recorded at 4:10 o'clock P M., FEB 2 1981

Reception No. 1848738

Mary Lou Zevenbergen
Weld County, Colorado Recorder.

2-1

FILING STAMP

State Documentary Fee
Date FEB 2 1981
$ 25.00

THIS DEED, Made this 29th day of January

19 81, between JOSEPH PFEIF AND OLINDA E. PFEIF

of the County of Weld and State of

Colorado, of the first part, and DOYLE KQEHN

whose legal address is 8474 Chase Dr.; Arvada, Co 80003

of the County of Jefferson and State of Colorado, of the second part:

WITNESSETH, That the said party of the first part, for and in consideration of the sum of ($250,000.00) TWO HUNDRED FIFTY THOUSAND AND NO/100---------- DOLLARS, to the said party of the first part in hand paid by the said party of the second part, the receipt whereof is hereby confessed and acknowledged, has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell, convey and confirm, unto the said party of the second part, his heirs and assigns forever, all the following described lot or parcel of land, situate, lying and being in the County of Weld and State of Colorado, to-wit:

See attached Exhibit A for legal description

also known as street and number

TOGETHER with all and singular the hereditaments and appurtenances thereto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever of the said party of the first part, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the said party of the second part, his heirs and assigns forever. And the said party of the first part, for himself, his heirs, executors, and administrators, does covenant, grant, bargain, and agree to and with the said party of the second part, his heirs and assigns, that at the time of the ensealing and delivery of these presents, he is well seized of the premises above conveyed, as of good, sure, perfect, absolute and indefeasible estate of inheritance, in law, in fee simple, and has good right, full power and lawful authority to grant, bargain, sell and convey the same in manner and form as aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments and encumbrances of whatever kind or nature soever. Except easements, rights of way, covenants, restrictions and reservations, of record on the date hereof, and taxes for the current year and subsequent years. Subject to a purchase money Trust Deed to be given by Albert S. Challenger and Celia L. Challenger in the the amount of $187,000.00 to Joseph Pfeif and Olinda E. Pfeif.

and the aboved bargained premises in the quiet and peaceable possession of the said party of the second part, his heirs and assigns against all and every person or persons lawfully claiming or to claim the whole or any part thereof, the said party of the first part shall and will WARRANT AND FOREVER DEFEND. The singular number shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.

IN WITNESS WHEREOF, the said party of the first part has hereunto set his hand and seal the day and year first above written.

Joseph Pfeif [SEAL]
JOSEPH PFEIF

Olinda E. Pfeif [SEAL]
OLINDA E. PFEIF

[SEAL]

STATE OF COLORADO
County of Arapahoe } ss.

The foregoing instrument was acknowledged before me this 29th day of January

19 81 by Joseph Pfeif and Olinda E. Pfeif

My commission expires 1-19, 1985. Witness my hand and official seal.

Martha Ann Hoelscher
Notary Public.

BOOK 927

1848738
2-2

Exhibit A - Legal Description

The Northwest Quarter (NW 1/4) and the North Half of the Southwest Quarter (N1/2 SW 1/4) of Section Twenty-nine (29), Township Five (5) North, Range Sixty-seven (67) West of the 6th P.M., County of Weld, State of Colorado, Except one acre in the Northeast corner of said Northwest Quarter (NW 1/4) conveyed to School District Number 7 by Warranty Deed recorded December 28, 1908 in BOok 287, Page 566 , and Except that part of the Northeast Quarter of Said Northwest Quarter (NE 1/4NW 1/4) conveyed to the Union Pacific Railroad Company by Warranty Deed recorded December 2, 1909.in Book 316, Page 53, and Further Excepting therefrom that certain tract of land containing approximately 41.3 acres conveyed to Henry Jacob Betz and Katherina Betz by Warranty Deed recorded in Book 1291, page 231, which said tract is more particularly described as follows:
Beginning at the Southwest corner of the North half of the Southwest Quarter of said Section 29, thence North 01° East along the West line of said Section 29, 1136.3 feet; thence North 62°31' East, 652.3 feet; thence North 87° 12' East, 378.6 feet; thence South 82°25' East, 132.1 feet; thence South 22°23' East, 580 feet, thence South 21°21' West, 264.6 feet; thence South 31°21' East, 547.3 feet; thence South 00°01' West, 196.3 feet; thence North 89°41' West, 1514.4 feet to the point of beginning.

County of Weld,
State of Colorado.

E. P.
D. E. P.

4.00K

BOOK 927 Recorded at 410 o'clock P M. FEB 2 1981 Weld County, Colorado
Reception No. 1848739 Mary Lou Zeeneerstein Recorder. by

2-1

THIS DEED, Made this 29th day of January ,19 81
between

DOYLE KOEHN

of the County of Jefferson and State of
Colorado, of the first part, and

ALBERT S. CHALLENGER AND CELIA L. CHALLENGER

whose legal address is P O Box 448; Evergreen, Colorado

of the County of Jefferson and State of
Colorado, of the second part:

FILING STAMP

WITNESSETH, that the said party of the first part, for and in consideration of the sum of

OTHER GOOD AND VALUABLE CONSIDERATION AND TEN AND NO/100---------- DOLLARS

and other good and valuable considerations to the said party of the first part in hand paid by the said parties of the second part, the receipt whereof is hereby confessed and acknowledged, has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell, convey and confirm unto the said parties of second part, their heirs and assigns forever, not in tenancy in common but in joint tenancy, all the following described lot or parcel of land, situate, lying and being in the County of Weld and State of Colorado, to wit:

See attached Exhibit A for Legal description

also known as street and number

TOGETHER with all and singular the hereditaments and appurtenances thereunto belonging, or in anywise appertaining and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever of the said party of the first part, either in law or equity, of, in and to the above bargained premises, with the hereditaments and appurtenances.

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto the said parties of the second part, their heirs and assigns forever. And the said party of the first part, for himself, his heirs, executors, and administrators, does covenant, grant, bargain and agree to and with the said parties of the second part, their heirs and assigns, that at the time of the ensealing and delivery of these presents, he is well seized of the premises above conveyed, as of good, sure, perfect, absolute and indefeasible estate of inheritance, in law, in fee simple, and has good right, full power and lawful authority to grant, bargain, sell and convey the same in manner and form aforesaid, and that the same are free and clear from all former and other grants, bargains, sales, liens, taxes, assessments and encumbrances of whatever kind or nature soever, Except easements, rights of way, covenants, restrictions and reservations, of record on the date hereof, and taxes for the current year and subsequent years and subject to a purchase money Trust Deed to be given by Albert S. Challenger and Celia L. Challenger in the amount of $187,000.00 to Joseph Pfeif and Olinda E. Pfeif.

and the above bargained premises in the quiet and peaceable possession of the said parties of the second part, the survivor of them, their assigns and the heirs and assigns of such survivor, against all and every person or persons lawfully claiming or to claim the whole or any part thereof, the said party of the first part shall and will WARRANT AND FOREVER DEFEND. The singular number shall include the plural, the plural the singular, and the use of any gender shall be applicable to all genders.

IN WITNESS WHEREOF the said party of the first part has hereunto set his hand and seal the day and year first above written.

Signed, Sealed and Delivered in the Presence of

Doyle Koehn [SEAL]
DOYLE KOEHN

[SEAL]

[SEAL]

STATE OF COLORADO
} ss.
County of Arapahoe

The foregoing instrument was acknowledged before me this 29th day of January ,19 81
by Doyle Koehn

My Commission expires 1-19 ,1985. Witness my hand and official seal.

Martha Ann Hoelscher
Notary Public

No. 921A. WARRANTY DEED.—To Joint Tenants.— Bradford Publishing Co., Denver, Colorado 11-79

FEB--2-81 C0294

20 OF

28 30 of

BOOK
927

1848739
2-2

Exhibit A - Legal Description

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Beginning at the Southwest corner of the North half of the Southwest Quarter of said Section 29, thence North 01^{o} East along the West line of said Section 29, 1136.3 feet; thence North $62^{o}31'$ East, 652.3 feet; thence North 87^{o} 12' East, 378.6 feet; thence South $82^{o}25'$ East, 132.1 feet; thence South $22^{o}23'$ East, 580 feet, thence South $21^{o}21'$ West, 264.6 feet; thence South $31^{o}21'$ East, 547.3 feet; thence South $00^{o}01'$ West, 196.3 feet; thence North $89^{o}41'$ West, 1514.4 feet to the point of beginning.

County of Weld,
State of Colorado.

E. P.
D. E. P.

DITCH NUMBER TEN.

THAT DITCH NUMBERED TEN, KNOWN AS THE HILL AND BRUSH DITCH.

George S. Hill and John M. Brush, claimants thereof, in this matter having been found in manner aforesaid to be a ditch used for the irrigation of lands, and taking its supply of water from the Big Thompson river, with headgate located in Sec. 24, T. 5, N. R. 68 W., and entitled by original construction to one appropriation of water from said river, to-wit: Priority No. 11, and thereby to the quantity of water hereinafter mentioned, for the use aforesaid, and for the benefit of the party or parties aforesaid; it is hereby adjudged and decreed that there be allowed to flow into said Ditch No. 10 from said river, for the use aforesaid, and for the benefit of the party or parties aforesaid, under and by virtue of said appropriation by original construction—Priority No. 11—so much water as will flow therein to the amount of sixty-one and eight hundred and one one-thousandths cubic feet of water per second of time, the appropriation of which water took effect on, and said Priority No. 11 dates from, the thirtieth day of June, A. D. 1866. 61.18

3c

STATE OF COLORADO, } ss
Water District No. 4. }

To the Hon. C. C. CARPENTER, Judge of the District Court of the First Judicial District of the State of Colorado.

I, Thos. R. Owen, jr., having been duly appointed, and legally qualified, Referee for "WATER DISTRICT NO. 4,"—said District embracing portions of the Counties of Boulder, Larimer, and Weld, and being within and under the jurisdiction of the said Court—do, by virtue thereof, hereby report to the said Hon. C. C. CARPENTER, Judge as aforesaid, my doings and findings, in relation thereto.

In re, The Neill and Brush Ditch, I do find

FIRST—That the name of said ditch is, and is to be hereafter known as The Neill and Brush Ditch.

SECOND—That the names of the owners of said ditch, together with their respective interests, and Postoffice address are as follows:

George A. Neill Jr.
Gail M. Brush Jr.
Helena
Colorado

THIRD—That said ditch is in Water District No. Four.

FOURTH—That the head of said ditch is located in Section 24. Tp 5 N. R. 68 W, in Larimer County, Colorado

FIFTH—That said ditch takes its supply of water from the Big Thompson River

SIXTH—That the general course of said ditch is North East

SEVENTH—That work was originally commenced on said ditch, the 30 day of November 1865 and completed by the 30 day of June 1866 and water run in it by the day of

EIGHTH—That as originally constructed it was 4 3/8 miles long 10 feet wide on the bottom 15 feet wide on top 2.0 inches deep 2 4/10 of an inch fall to the mile grade. Depth of water run in it inches.

~~NINTH—That the nature of the work as to difficulty of construction was~~

TENTH—That the diligence used in building was ~~in~~ sufficient.

ELEVENTH—The capacity of said ditch, as originally constructed, was 61.801 cubic feet per second inches of water, or so much water as would flow through a ditch of the following dimensions, ~~to wit~~ ~~feet wide on the bottom~~ ~~feet wide on top~~ feet deep, with a grade of ~~inch fall to the rod~~.

TWELFTH—That the amount of water claimed for said ditch by virtue of ORIGINAL CONSTRUCTION is 6.9 cubic feet per second

THIRTEENTH—That the date of the ORIGINAL APPROPRIATION of water by virtue of said ditch was the 30 day of June 1866

~~FOURTEENTH—That the ORIGINAL APPROPRIATION of water for said ditch is NUMBER~~

FIFTEENTH—That the number of acres of land lying under and irrigated, or proposed to be irrigated, by water from said ditch is 15 ac That of this number there have been actually irrigated 12 ac acres. ~~That the nature of the soil of said land is~~

~~That such land requires inches of water per acre to irrigate the same~~

SIXTEENTH—That the amount of water appropriated by virtue of the ORIGINAL CONSTRUCTION of said ditch is .91.2 cubic feet per ~~inch~~ second ~~Number four~~

~~That said ditch was enlarged and extended.~~

That work was commenced thereon the ..... day of ....., ..., and completed the ..... day of .....

That as ..... enlarged, said ditch was ..... miles long, ... feet wide on the bottom and ..... feet wide on top, and ..... feet deep, with a grade of ..... of an inch fall to the rod. That the depth of water run therein, was ..... inches.

That the nature of the work as to difficulty of construction, was .....

That the degree of diligence used was ..... sufficient.

That the increased capacity thereby occasioned was ..... making a total of .....

That the number of acres of land lying under and being, or proposed to be, irrigated by water from said ditch as ..... enlarged is ..... acres.

That the nature of the soil of said land is .....

That it requires ..... inches of water per acre to irrigate said land.

That there has been actually irrigated from said ditch ..... acres.

That the amount of water claimed for said ditch as so enlarged, is ..... inches, or so much as will flow through a ditch of the following dimensions, to-wit: ..... feet wide on the bottom ..... feet wide on top and ..... feet deep, with a grade of ..... of an inch fall to the rod.

That the amount of water actually appropriated by said ditch as so ..... enlarged is ..... inches, or so much water as will pass through a ditch of the following dimensions, towit: ..... feet wide on the bottom, ... feet wide on top, and ..... feet deep, with a grade of ..... of an inch fall to the rod.

That the date of appropriation of water by the ..... enlargement was the ..... day of .....,

~~That the Number of Appropriation, by virtue of ..... enlargement is NUMBER .....~~

REMARKS.

In arriving at the capacity of this ditch I took an average of the different estimates. The testimony does not show the amount of water required to irrigate an acre nor the quality of the soil. So I have based my estimate on the testimony of J Nesbitt 208. that an average of 1/4 sec. foot per second to irrigate lands under the Big Thompson.

Respectfully Submitted,

THOS. R. OWEN, JR.,
Referee, Water District No. 4.

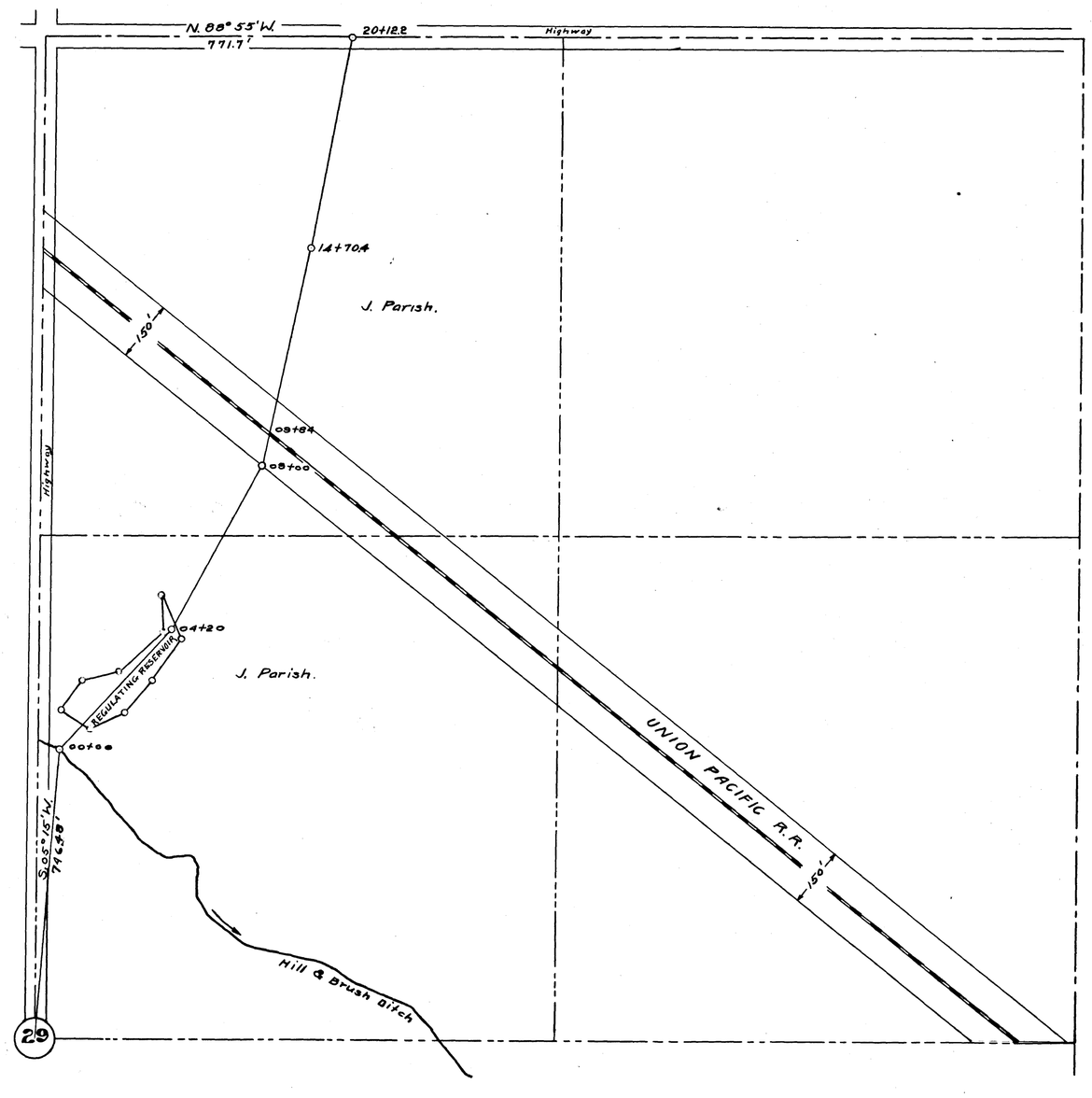
33

91

807

File 895

32



NOTES OF SURVEY
LEE SEEP DITCH

STA.	TO STA.	DISTANCE	BEARING
00+00	04+20	420	N. 42° 15' E.
04+20	08+00	380	N. 20° 17' E.
08+00	14+70.4	570.4	N. 12° 17' E.
14+70.4	20+12.2	541.8	N. 10° 47' E.

Know all men by these presents: That the undersigned N.R. Lee claimant, whose post-office address is Johnstown, Colorado, has caused to be located The Lee Seep Ditch as hereinafter mentioned, has made these several statements relative thereto, and filed the same in compliance with the laws of the State of Colorado. The accompanying map, which shows the location of said ditch, forms a part of this filing and is hereby made a part thereof,

First. The headgate is located at a point on the North line of section N°29, Township 5 North, Range 67 West of the Sixth Principal Meridian from whence the ¼ corner common to Sections 29 & 20 bears N. 88°55'W. 771.7 feet. And derives its source of supply from seepage and waste waters of the Greeley and Loveland Ditch and the Farmers Ditch. Its outlet is located on the bank of the Hill and Brush Ditch, from whence the center of section N°29, Township 5 North, Range 67 West of the Sixth Principal Meridian bears S. 05° 15' W. 746.48 feet.

Second. The land to be irrigated is located in the N.E.¼ of section N°33 Township 5 North, Range 67 West of the sixth Principal Meridian.

Third. The depth of said ditch is 1 foot.
" width " " " " 4 feet on top.
" " " " " " 2 feet on bottom.
" Grade " " " " 5 feet per 1000 feet.
" Length " " " " 2,012.2 feet.

Fourth. The carrying capacity of said ditch is 7.8 cubic feet per second of time (obtained by Kutters formula using "n" = .025), for which claim is hereby made for irrigation purposes

Fifth. The estimated cost is $ 100.00

Sixth. The work was commenced by survey on the 14th day of October A.D. 1910.

Seventh.

N R Lee

STATE OF COLORADO } ss.
COUNTY OF WELD

P.A. Hartung, being duly sworn on his oath, deposes and says that he is the engineer of the Lee Seep Ditch, that the survey of the same and the map thereof was made under his instructions and that such survey is accurately represented upon this map, that he has read the statements thereon, and that the same are true of his own knowledge.

P.A. Hartung
Engineer

Subscribed and sworn to before me this 22 day of October A.D. 1910
My commission expires March 15 1913

James Turcell
Notary Public.

STATE ENGINEER'S OFFICE. Denver, Colorado.

I hereby certify that this map and statement has been examined and approved by me and is a duplicate of the one filed in the office of the State Engineer on the 8th day of Nov A.D. 1910.

Chas. McConnell
State Engineer.
By A.P. Hewitt
Deputy.

No. 160859

MAP OF THE
LEE SEEP DITCH.
WELD COUNTY COLORADO
IRRIGATION DIVISION N°1 WATER DISTRICT N°4
COURSES TRUE MAGNETIC VARIATION 15° E.
Scale of Map 1 inch = 200 feet.

8 Nov 19 1910
A.J. Luther
A.P. Hewitt
50 pd

DUPLICATE

8016

NO. 1683

The Hill & Brush Ditch Company

CERTIFICATE OF INCORPORATION

OF

THE HILL & BRUSH DITCH COMPANY.

KNOW ALL MEN BY THESE PRESENTS, That the undersigned, Alfred Crebbin, Nutter R. Lee and Clara A. Stevens, all being persons residing in the State of Colorado, have associated themselves together and do hereby associate themselves together under and by virtue of the laws of the State of Colorado and to that end do hereby in triplicate certify and declare:

FIRST. The corporate name of said company is and shall be The Hill & Brush Ditch Company.

SECOND. The objects for which said company is hereby created are and shall be as follows:

(1) To purchase from the present owners thereof in consideration of stock in this company and thus to become the owner of the following irrigating ditch and other real property described as follows: That certain old irrigating ditch known as the Hill & Brush ditch, also designated as ditch No. 10 in water district No. 4 in the State of Colorado, deriving its water supply from the Big Thompson creek or river with its headgate on or near the northeast bank thereof in Section 24, Township 5 North, of Range 68 West of the 6th Principal Meridian in Larimer County, Colorado, and thence extending in a general southeasterly course for a distance of five or six miles through, across and over portions of the South Half of said Section 24 and through the following sections or parts of sections in Township 5 North, of Range 67 West in Weld County, Colorado, viz.: South Half of Section 19, Northeast Quarter of Section 30, Sections 29 and 28, the North Half of Section 33, the West Half of Section 34 and the Southeast Quarter of Section 33; also the right of way occupied by said ditch and its banks and necessary for the care and maintenance thereof throughout its entire course; also the diverting dam or dams, river headgate, lateral

headgates, embankments, flumes, siphons and all other physical structures in any manner connected with and necessary to the operation and maintenance of said irrigating ditch; also all water rights, privileges, appropriations, and priorities made and effected by means of said Hill & Brush ditch, its construction, maintenance, operation and use for irrigation purposes and particularly that certain appropriation of water for irrigation determined by the District Court of Boulder County, Colorado in water district No. 4 by decree entered and rendered on the 28th day of May, A. D. 1883 under decreed priority No. 11 in said water district No. 4 there designated as "so much water as will flow therein to the amount of 61.801 cubic feet of water per second of time, the appropriation of which water took effect on and said priority No. 11 dates from, the 30th day of June, A. D. 1866"; also all other rights, franchises and hereditaments corporeal and incorporeal in any manner pertaining to the property above described.

(2) To operate, manage, control, superintend, maintain and keep in repair said irrigating ditch, its diverting dam or dams and all structures and headgates connected therewith to be owned by this company as a mutual ditch company for the use and benefit of its respective stockholders to whom the water to be diverted into and to flow in, through and along the same shall be apportioned at lateral headgates along its line pro rata according to their shares of stock.

(3) To provide funds to carry out the foregoing objects by assessments to be levied on its shares of stock by its stockholders at stockholders' meetings and when necessary to borrow money and secure the same by mortgages or deeds of trust on the property of said company.

THIRD. The amount of the capital stock of said company shall be Twelve Thousand Eight Hundred Dollars ($12,800).

FOURTH. The term of existence of said company shall be twenty years.

FIFTH. The number of shares of which the capital stock of said company shall consist shall be one hundred twenty-eight of par value $100 each.

SIXTH. The number of directors of said company shall be three.

SEVENTH. The names of the directors who shall manage the affairs of said company for the first year of its existence or until their successors are elected at first stockholders' meeting of said company shall be Alfred Crobbin, Hutter R. Lee and Clara A. Stevens.

EIGHTH. The name of the town or place and the county in which the principal or secretary's office of said company shall be kept shall be the city of Loveland in Larimer County, Colorado, subject to change on vote of the board of directors to the town of Milliken in Weld County, Colorado.

NINTH. The names of the counties in which the principal business of said company shall be carried on shall be Larimer and Weld.

TENTH. The natural stream, channel or course from which water is to be taken and diverted by means of said ditch for irrigation is the Big Thompson creek or river.

ELEVENTH. The point or place at or near which water is to be taken out of said river is on the northeast bank thereof at the headgate of said Hill & Brush ditch as hitherto used and maintained in Section 24, Township 5 North, of Range 68 West of the 6th Principal Meridian in Larimer County, Colorado.

TWELFTH. The line or course of said irrigating ditch as near as may be stated is as follows: Beginning at its said headgate, thence running in a general southeasterly course through, across and over the South Half of said Section 24 and the following sections and parts of sections in Township 5 North, of Range 67 West in Weld County,

Colorado, viz.: South Half of Section 19, Northeast Quarter of Section 30, Sections 29 and 28, the North Half of Section 33, the West Half of Section 34 and the Southeast Quarter of Section 33.

THIRTEENTH. The use to which water diverted from said natural stream into, through and along said ditch is intended to be applied as for irrigation purposes and incidental domestic uses on lands capable of irrigation therefrom.

FOURTEENTH. The board of directors of said company shall have power to make such prudential by-laws as it may deem proper for the management of said company according to statute in such case made and provided. Cumulative voting shall be allowed.

IN WITNESS WHEREOF, The Undersigned incorporators have severally set their hands and seals this 15th day of June, A. D., 1915 to this document in triplicate for filing respectively in the office of the secretary of state, of Colorado and those of the county clerk and recorder of Weld County, Colorado and of Larimer County, Colorado.

Alfred Crebbin (Seal)

Nutter R. Lee (Seal)

Clara A. Stevens (Seal)

State of Colorado, }
County of Larimer } ss.

I, Roy M. Lightner, a notary public in and for said county and state do hereby certify that Nutter R. Lee and Clara A. Stevens, each of age more than twenty-one years, personally known to me to be the persons whose names are subscribed to the annexed and foregoing certificate of incorporation, appeared before me this day in person and each acknowledged for himself and herself that he and she signed, sealed and delivered the said instrument of writing severally as his and her free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 15th day of

June, A. D. 1915.

I further certify my notarial commission expires Feby 17-1919.

Roy M. Lighter
Notary Public.

State of Colorado,)
) ss.
City and County of Denver.)

I, Ethele a. Mason, a notary public in and for said county and state do hereby certify that Alfred Crebbin, of age more than twenty-one years, personally known to me to be the person whose name is subscribed to the annexed and foregoing certificate of incorporation, appeared before me this day in person and acknowledged for himself that he signed, sealed and delivered the said instrument of writing as his free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 22nd day of June, A. D. 1915.

I further certify my notarial commission expires March 4, 1919

Ethele A. Mason
Notary Public.

1683

216304

ARTICLES OF INCORPORATION

OF

THE HILL & BRUSH DITCH COMPANY.

State of Colorado, }
County of Weld, } ss.

I hereby certify that this instrument was filed for record in my office, at 1:30 o'clock P. M. May 23 19N and is duly recorded in Book No. ---- page ----

J. E. SNOOK
RECORDER.

By M. Delbridge
DEPUTY.

Fees 5.00

Filed

(Envelope 1683)

C-907

Recorded JUN 20 1936 at 11 O'clock A. M.
Reception No. 241169 WALTER F. MORRISON, Recorder

STATE OF COLORADO)
) SS.
COUNTY OF WELD)

Certificate of Renewal of the Certificate of Incorporation, Johnstown, Colorado, June 19, A.D. 1936

TO WHOM IT MAY CONCERN:

This is to certify that at a special meeting of the stockholders of The Hill and Brush Ditch Company, at the residence of N. R. Lee on the 19th day of June, A. D. 1936, duly called by the stockholders representing at least ten per cent of the entire capital stock of the company, the call being published for three weeks in the Johnstown Breeze, a Weekly newspaper published at Johnstown, State of Colorado, and notice of said meeting having been mailed to each stockholder thirty days prior to June 19, 1936, there being represented at such meeting 74 shares of capital stock of said company out of a total of 128 shares.

That at said meeting, a resolution was passed thereby extending the corporate existence of this said company for a period of 90 years from and after date of expiration of its corporate life, the same being the 22nd day of June, A. D. 1935. The resolution receiving a majority vote of all outstanding stock of the company, the President and Secretary were authorized to certify this resolution under the corporate seal of said company and to send such certificate to the Secretary of State of the State of Colorado, to file a duplicate certificate under seal of the company in the office of the County Clerk and Recorder of Weld County, Colorado, and in the office of the County Clerk and Recorder of Larimer County, Colorado; and in pursuance of such resolution we do hereby certify same under seal of the company.

HILL AND BRUSH DITCH CO.

Attest:

(W. M. Ward) Secretary

N. R. Lee

(N. R. Lee) President

INDEXED
1683

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Certificate of Renewal

IA-050 -1174 JUN 20

The Hill Branch Ditch Co

STATE OF COLORADO,
COUNTY OF WELD } ss.

I HEREBY CERTIFY THAT THE INSTRUMENT

WAS FILED FOR RECORD IN MY OFFICE AT
11.00 O'CLOCK A M. JUN 20 1936

AND DULY RECORDED IN BOOK NO
995 PAGE

Walter F. Maxwell
RECORDER

BY B H Buckingham
DEPUTY

FEES 50

FILED AND RECORDED

Ruth E. Adams

O-907

Recorded JUN 20 1936 at 11:00 O'clock A. M.
Reception No. 241169 WALTER F. MORRISON, Recorder

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) SS.
COUNTY OF WELD)

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TO WHOM IT MAY CONCERN:

This is to certify that at a special meeting of the stockholders of The Hill and Brush Ditch Company, at the residence of N. R. Lee on the 19th day of June, A. D. 1936, duly called by the stockholders representing at least ten per cent of the entire capital stock of the company, the call being published for three weeks in the Johnstown Breeze, a Weekly newspaper published at Johnstown, State of Colorado, and notice of said meeting having been mailed to each stockholder thirty days prior to June 19, 1936, there being represented at such meeting 74 shares of capital stock of said company out of a total of 128 shares.

That at said meeting, a resolution was passed thereby extending the corporate existence of this said company for a period of 90 years from and after date of expiration of its corporate life, the same being the 22nd day of June, A. D. 1935. The resolution receiving a majority vote of all outstanding stock of the company, the President and Secretary were authorized to certify this resolution under the corporate seal of said company and to send such certificate to the Secretary of State of the State of Colorado, to file a duplicate certificate under seal of the company in the office of the County Clerk and Recorder of Weld County, Colorado, and in the office of the County Clerk and Recorder of Larimer County, Colorado; and in pursuance of such resolution we do hereby certify same under seal of the company.

HILL AND BRUSH DITCH CO.

N. R. Lee
(N. R. Lee) President

Attest:
(W. M. Ward) Secretary

DISTRICT COURT, WATER DIVISION I, COLORADO FILED IN WELD COUNTY

CASE NO. 84 CW 204

'88 FEB 3 AM 10:56

ORDER DELETING WATER RIGHTS FROM THE REVISED 1978 ABANDONMENT LIST.

JEAN T. SELVAGGIO, CLERK
WELD COUNTY, COLO.

IN THE MATTER OF THE ABANDONMENT OF THE GERMAN NO. 5 RESERVOIR

On Nov. 20, 1987, the division engineer, Water Division No. 1, moved the court to enter an order deleting water rights from the tabulation of water rights determined to have been abandoned, in whole or in part (revised 1978 abandonment list). No objection to the division engineer's motion has been filed. The court has considered the motion and made such other investigation as necessary and hereby makes the following FINDINGS:

1. The revised 1978 abandonment list as filed June 27, 1984 in Case No. 84 CW 204 stated that the German No. 5 Reservoir water right (Sequence No. 200214) was determined to have been abandoned.

2. The division engineer erroneously determined that there had been a failure for a period of ten or more years to apply to a beneficial use water available under these water rights when needed by the person entitled to use same. Therefore, there exists no presumption of abandonment of these water rights with respect to the amount of such available water on the revised 1978 abandonment list. Section 37-92-401 (11), C.R.S. (1984 Supp.).

3. The German No. 5 Reservoir (Sequence No. 200214) should, therefore, be deleted from the revised 1978 abandonment list.

4. The above amendment is necessary to avoid prejudice to the owner or user of the water rights involved.

WHEREFORE, the court hereby ORDERS that the German No. 5 Reservoir water right be deleted from the revised 1978 abandonment list that was filed in Case No. 84 CW 204 and be reinstated in the revised 1978 tabulation.

DATED THIS 3rd day of February, 1988

BY THE COURT

WATER JUDGE

FILED IN DISTRICT COURT

DISTRICT COURT, WATER DIVISION NO. 1, STATE OF COLORADO

Case No. 84 CW 204

88 FEB 3 AM 10: 56

ABANDONMENT ORDER

IN THE MATTER OF THE DIVISION ENGINEER'S ABANDONMENT LIST FOR WATER DIVISION NO. 1

THIS MATTER, came before this court upon the filing by the Division Engineer for Water Division No. 1 of a list of water rights and conditional water rights to be abandoned pursuant to Section 37-92-402, C.R.S. (1973 and 1986 Supp.). This court makes the following Findings of Fact, Conclusions of Law, and Order:

1. On July 2, 1984, the Division Engineer for Water Division No. 1 filed a list of water rights and conditional water rights to be abandoned in Water Division No. 1 (hereinafter referred to as the 1984 Abandonment List).

2. The 1984 Abandonment List was subsequently sent by registered mail to the owner or last-known owner or claimant, if known, of every water right claimed to be abandoned and was published in a newspaper for four (4) successive weeks in each county in which listed water rights were located.

3. The statutory period to protest the inclusion of such rights, pursuant to Section 37-92-402(5), C.R.S. (1986 Supp.), expired on December 31, 1984.

4. Numerous protests were filed to water rights included on the 1984 Abandonment List. All protests were docketed by the court in separate cases with individual case numbers. Adequate opportunity for hearing was provided for every Protest that was filed. All determinations with respect to those protests have been made by the court. Those cases are now closed. A listing of the protests is attached hereto as Exhibit A.

5. Several Motions to Intervene were filed after the statutory period to protest the inclusion of water rights on the 1984 Abandonment List expired. These motions were docketed by the court in Case No. 84 CW 204. Adequate opportunity for hearing was provided for every Motion to Intervene that was filed. All determinations with respect

to those motions have been made by the court.

6. Several revisions to the 1984 Abandonment List were made. These revisions reflect the outcome of the protests that were filed or are necessary to correct clerical errors that were made in compiling the list. These revisions were accomplished either by Motion filed by the Division Engineer or by Stipulation of the parties. This court has entered all appropriate orders with respect to those motions. No additional publication is necessary or warranted.

7. This court has jurisdiction over the subject matter, the water rights in question and all parties, whether appearing or not. All requirements of Section 37-92-402, C.R.S. (1986), with respect to the 1984 Abandonment List, have been complied with.

8. This Order is a final judgment of the court as to the abandonment of those rights included on the 1984 Abandonment List.

9. Water rights which are to be abandoned are contained on Exhibit B, which is incorporated herein by reference.

10. Water rights which are to be deleted from the 1984 Abandonment List, and to be reinstated in the Division Engineer's Tabulation of Water Rights are contained in Exhibit C, which is incorporated herein by reference.

Done this 3rd day of February, 1988.

BY THE COURT

HONORABLE ROBERT A. BEHRMAN
Water Judge, Water Division No. 1
State of Colorado

ABANDONMENT LIST COURT CASES BY CASE NO.

CASE NO	NAME	SEQ NO	STRUCTURE NAME	ACTION	COMMENTS
84CW204	LARSON, EVERIT	0100075	WADLIN DITCH	DELETE	CHANGE CASE NO. 87CW068
84CW204	LARSON, EVERIT	0100094	WADLIN RESERVOIR	DELETE	CHANGE CASE NO. 87CW068
84CW204	KOCH, CLARENCE	0300533	WM. CALLOWAY D. 2	WITHDREW PROT	MOTION TO INTERVENE
84CW204	DIVISION ENGINEER	0400166	HUFF DITCH	DELETE	MOTION BY DIV. ENG.
84CW204	DIVISION ENGINEER	0400165	DOLIPH DITCH	DELETE	MOTION BY DIV. ENG.
84CW204	DIVISION ENGINEER	0400168	GRIFFITH DITCH	DELETE	MOTION BY DIV. ENG.
84CW204	DIVISION ENGINEER	0400169	GROUND DITCH	DELETE	MOTION BY DIV. ENG.
84CW204	GOLCONDA	0700382	PAULINE MILL CK D.	DELETE	MOTION TO INTERVENE
84CW204	GOLCONDA	0700383	PAULINE MILL CK D EN	DELETE	MOTION TO INTERVENE
84CW204	JOHNSON, BERNICE	0800258	KING DITCH	DELETE	MOTION TO INTERVENE
84CW204	CMW COMPANY	0800505	MIKELSON POND & SPG	DELETE	MOTION TO INTERVENE
84CW204	WALKER, ROBERT	2300483	JACKSON DITCH	DELETE	MOTION TO INTERVENE
84CW204	WALKER, ROBERT	2300482	EDMISTON DITCH	DELETE	MOTION TO INTERVENE
84CW204	WALKER, ROBERT	2300551	HAVER DITCH 4	DELETE	MOTION TO INTERVENE
84CW204	WALKER, ROBERT	2300552	HAVER DITCH 5	DELETE	MOTION TO INTERVENE
84CW204	WILEY, WAYNE	6500017	F.D. JOHNSON DITCH	ABANDON	INTERVENE, NO ACTION
84CW204	WILEY, WAYNE	6500016	PIERCE MILLER DITCH	WITHDREW INT	DUPLICATES CASE 84CW335
84CW204	DIVISION ENGINEER	0301033	RIST CANYON RES.	DELETE	MOTION BY DIV. ENG.
84CW204	SACK	0200214	GERMAN NO. 5 RES.	DELETE	MOTION BY DIV. ENG.
84CW228	ALLIS	0800191	STEVENS DITCH	ABANDON	COURT HEARING ON PROTEST
84CW228	ALLIS	0800255	STEVENS RES. 1 & 2	ABANDON	COURT HEARING ON PROTEST
84CW228	ALLIS	0800260	STEVENS RES. 4	ABANDON	COURT HEARING ON PROTEST
84CW230	JOHNSON	2300669	WIST MILL DITCH & PL	ABANDON	NO CHANGE FILED
84CW243	NALL	2300611	L. PENNSYLVANIA D.	WITHDREW PROT	
84CW247	SHAWNEE WATER CO	8000893	SHAWNEE WATER SUP. D	DELETE	MOTION BY DIV. ENG.
84CW247	SHAWNEE WATER CO.	8000908	SHAWNEE RESERVOIR	DELETE	MOTION BY DIV. ENG.
84CW260	ESPY ICE CO.	0600391	ESPY ICE CO. DITCH 1	DELETE	COURT HEARING ON PROTEST
84CW260	ESPY ICE CO.	0600392	ESPY ICE CO. DITCH 2	DELETE	COURT HEARING ON PROTEST
84CW260	ESPY ICE CO.	0600393	ESPY ICE CO. DITCH 3	DELETE	COURT HEARING ON PROTEST
84CW271	HARTSEL RANCH	2300579	O Y E RESERVOIR	DELETE	STIPULATION WITH DE
84CW271	HARTSEL RANCH	2300580	O Y E OUTLET DITCH	WITHDREW PROT	STIPULATION ON PROTEST
84CW285	HARTSEL RANCH	2300940	POYNER RESERVOIR	WITHDREW PROT	STIPULATION ON PROTEST
84CW292	ELY	0800038	FIFTY-NINE DITCH 2	ABANDON	NO ACTION ON PROTEST
84CW292	ELY	0800076	FIFTY-NINE D. 2 ENL.	ABANDON	NO ACTION ON PROTEST
84CW292	ELY	0800070	KELLY DITCH	ABANDON	NO ACTION ON PROTEST
84CW293	LEGGETT DITCH CO.	0600115	REVOLUTION DITCH	WITHDREW PROT	CASE 84CW359 MODIFIED
84CW295	ANDERSON WHEAT	0300462	WILLIAMS DITCH 1	ABANDON	COURT HEARING ON PROTEST
84CW295	ANDERSON WHEAT	0300463	ELMER F KEACH SEEP	ABANDON	COURT HEARING ON PROTEST
84CW317	MASTERS INVESTMENT	0100036	SCHULTZ DITCH	WITHDREW PROT	CASE NO. 81CW057 ABAND.
84CW334	MARTIN	0500152	MEADOW DITCH	DELETE	COURT HEARING ON PROTEST
84CW335	MYER	6500016	PIERCE MILLER DITCH	DELETE	CHANGE CASE NO. 85CW246
84CW337	DIVISION ENGINEER	0200188	WHIPPLE DITCH	DELETE	MOTION BY DIV. ENG.
84CW338	DIVISION ENGINEER	0200036	WHIPPLE DITCH	DELETE	MOTION BY DIV. ENG.
84CW339	DIVISION ENGINEER	0500155	SITES DITCH	DELETE	MOTION BY DIV. ENG.

84-CW-204
Exhibit A

ABANDONMENT LIST COURT CASES BY CASE NO.

CASE NO	NAME	SEQ NO	STRUCTURE NAME	ACTION	COMMENTS
84CW340	DIVISION ENGINEER	0500156	EVANS DITCH	DELETE	MOTION BY DIV. ENG.
84CW341	DIVISION ENGINEER	0800246	GREEN MEADOW DITCH	DELETE	MOTION BY DIV. ENG.
84CW342	DIVISION ENGINEER	0900063	IND. HIGHLINE DITCH	DELETE	MOTION BY DIV. ENG.
84CW343	DIVISION ENGINEER	0900064	IND. HIGHLINE DITCH	DELETE	MOTION BY DIV. ENG.
84CW344	DIVISION ENGINEER	2300611	L. PENNSYLVANIA D.	DELETE	MOTION BY DIV. ENG.
84CW345	DIVISION ENGINEER	2300226	ALDEN MILLIGAN D.	DELETE	MOTION BY DIV. ENG.
84CW346	DIVISION ENGINEER	8000718	ELDER DITCH	DELETE	MOTION BY DIV. ENG.
84CW347	DIVISION ENGINEER	0200144	CLEAR SPRING DITCH	CORRECT	MOTION TO CORRECT BY DE
84CW348	DIVISION ENGINEER	0301033	RIST CANYON RES.	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW349	DIVISION ENGINEER	0400051	LOUDEN IRR. CANAL	CORRECT	MOTION TO CORRECT BY DE
84CW350	DIVISION ENGINEER	0400146	HUPPS BEAVER DITCH	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW351	DIVISION ENGINEER	0400147	HUPPE DITCH	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW352	DIVISION ENGINEER	0400148	BEAVER DITCH	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW353	DIVISION ENGINEER	0400155	HUPPS BEAVER DITCH	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW354	DIVISION ENGINEER	0400156	HUPPE DITCH	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW355	DIVISION ENGINEER	0400157	BEAVER DITCH	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW356	DIVISION ENGINEER	0400161	HUPPS BEAVER DITCH	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW357	DIVISION ENGINEER	0600144	WELLMAN DITCH	CORRECT	MOTION TO CORRECT BY DE
84CW358	DIVISION ENGINEER	0600145	MATHEWS DITCH	CORRECT	MOTION TO CORRECT BY DE
84CW359	DIVISION ENGINEER	0600115	REVOLUTION DITCH	CORRECT	MOTION TO CORRECT BY DE
84CW360	DIVISION ENGINEER	0600488	GREEN LAKE RES. 4	CORRECT	MOTION TO CORRECT BY DE
84CW361	DIVISION ENGINEER	0700302	JOINT RESERVOIR	CORRECT	MOTION TO CORRECT BY DE
84CW362	DIVISION ENGINEER	0700341	MASON	CORRECT	MOTION TO CORRECT BY DE
84CW363	DIVISION ENGINEER	0800338	FEARNLEY DITCH ENL.	CORRECT	MOTION TO CORRECT BY DE
84CW364	DIVISION ENGINEER	0803457	KIEWIT WELL 3-4575-F	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW365	DIVISION ENGINEER	0803456	KIEWIT WELL 4-5745-F	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW366	DIVISION ENGINEER	2300667	ALMA TOWN CLAIM	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW367	DIVISION ENGINEER	2300579	O Y Z RESERVOIR	CORRECT	MOTION TO CORRECT BY DE
84CW368	DIVISION ENGINEER	2300580	O Y Z OUTLET DITCH	CORRECT	MOTION TO CORRECT BY DE
84CW369	DIVISION ENGINEER	2300581	TARRYALL RESERVOIR	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW370	DIVISION ENGINEER	6500015	C.B.Q. RR CO. D. PL	CORRECT	MOTION TO CORRECT BY DE
84CW371	DIVISION ENGINEER	8000681	KENOSHA DITCH	WITHDREW MOTION	MOTION TO CORRECT BY DE
84CW396	MEYERTONS	0600425	CARIBOU MILL PL	DELETE	COURT HEARING ON PROTEST
84CW398	SANDS	8000718	ELDER DITCH	WITHDREW PROT	
84CW399	LANGENDOERFER	4900055	NANNIE BODEN DITCH	ABANDON	COURT HEARING ON PROTEST
84CW404	HUFFMAN	8000838	PORTER UPPER DITCH	DELETE	CHANGE CASE NO. 85CW283
84CW404	HUFFMAN	8000839	PORTER UPPER RES.	DELETE	CHANGE CASE NO. 85CW283
84CW406	POLLOCK	0800224	JAMES DITCH	DELETE	CHANGE TO BE FILED
84CW406	POLLOCK	0802464	POLLOCK W. 2-RF-779	DELETE	CHANGE TO BE FILED
84CW407	ROCCHIO, C. R.	0800288	COLEMAN PL & PP	ABANDON	NO CHANGE FILED
84CW412	DIST 6 WATER USERS	0600044	PLUMB DITCH	WITHDREW PROT.	CASE NO. W-358 ABANDONED
84CW412	DIST 6 WATER USERS	0600046	RURAL DITCH	MODIFY	MODIFY AMOUNT ABANDONED
84CW412	DIST 6 WATER USERS	0600102	DELEHANT TOM DITCH	MODIFY	MODIFY AMOUNT ABANDONED
84CW413	METRO NAT BANK	8000734	SPALDING DITCH	ABANDON	COURT HEARING ON PROTEST

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Exhibit A

ABANDONMENT LIST COURT CASES BY CASE NO.

CASE NO	NAME	SEQ NO	STRUCTURE NAME	ACTION	COMMENTS
84CW414	CHERRY CK STATE REC	0803578	COLO GAME FISH W 6	DELETE	COURT HEARING ON PROTEST
84CW414	CHERRY CK STATE REC	0803579	COLO GAME FISH W 7	DELETE	COURT HEARING ON PROTEST
84CW420	WALKER, BILLY	8000687	WEST DITCH	MODIFY	CHANGE CASE NO. 85CW327
84CW420	WALKER. BILLY	8000688	EAST DITCH	MODIFY	CHANGE CASE NO. 85CW327
84CW422	GUENZI	6400045	SHORTLINE DITCH	DELETE	CHANGE CASE NO. 85CW321
84CW422	GUENZI	6400066	SHORTLINE RESERVOIR	DELETE	CHANGE CASE NO. 85CW321
84CW423	CALLOWAY LAND CO.	0300547	CHASE DITCH	~~MODIFY~~ Delete	~~MODIFY AMOUNT ABANDONED~~ See [illegible]18
84CW424	JUDSON	0300533	WM CALLOWAY D. 2	MODIFY	MODIFY AMOUNT ABANDONED
84CW425	JUDSON	0301035	WM CALLOWAY D. 1	~~MODIFY~~ Delete	COURT HEARING ON PROTEST
84CW426	USA	0400027	BRINWOOD NO. 1	DELETE	CHANGE CASE NO. 85CW379
84CW427	USA	0400094	JONES DITCH	DELETE	CHANGE CASE NO. 85CW380
84CW428	USA	0400095	HUPPE DITCH	DELETE	CHANGE CASE NO. 85CW381
84CW429	USA	0400096	BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW382
84CW430	USA	0400103	HORSESHOE DITCH	DELETE	CHANGE CASE NO. 85CW343
84CW431	USA	0400133	JONES DITCH 2	DELETE	CHANGE CASE NO. 85CW346
84CW432	USA	0400134	JONES DITCH 1	DELETE	CHANGE CASE NO. 85CW349
84CW433	USA	0400135	JONES DITCH	DELETE	CHANGE CASE NO. 85CW346
84CW434	USA	0400136	JONES DITCH	DELETE	CHANGE CASE NO. 85CW349
84CW435	USA	0400138	HORSESHOE DITCH 1	DELETE	CHANGE CASE NO. 85CW383
84CW436	USA	0400139	HORSESHOE DITCH	DELETE	CHANGE CASE NO. 85CW383
84CW437	USA	0400140	HORSESHOE DITCH 2	DELETE	CHANGE CASE NO. 85CW346
84CW438	USA	0400141	HORSESHOE DITCH	DELETE	CHANGE CASE NO. 85CW346
84CW439	USA	0400142	HORSESHOE DITCH 3	DELETE	CHANGE CASE NO. 85CW350
84CW440	USA	0400143	HORSESHOE DITCH	DELETE	CHANGE CASE NO. 85CW350
84CW441	USA	0400144	HORSESHOE DITCH 4	DELETE	CHANGE CASE NO. 85CW347
84CW442	USA	0400145	HORSESHOE DITCH	DELETE	CHANGE CASE NO. 85CW347
84CW443	USA	0400146	HUPPS BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW345
84CW444	USA	0400147	HUPPE DITCH	DELETE	CHANGE CASE NO. 85CW345
84CW445	USA	0400148	BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW345
84CW446	USA	0400149	HUPPS BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW344
84CW447	USA	0400150	HUPPE DITCH	DELETE	CHANGE CASE NO. 85CW344
84CW448	USA	0400151	BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW344
84CW449	USA	0400152	HUPPS BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW348
84CW450	USA	0400153	HUPPE DITCH	DELETE	CHANGE CASE NO. 85CW348
84CW451	USA	0400154	BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW348
84CW452	USA	0400155	HUPPS BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW384
84CW453	USA	0400156	HUPPE DITCH	DELETE	CHANGE CASE NO. 85CW384
84CW454	USA	0400157	BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW384
84CW455	USA	0400159	BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW344
84CW456	USA	0400160	HUPPS BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW348
84CW457	USA	0400161	HUPPS BEAVER DITCH	DELETE	CHANGE CASE NO. 85CW384
84CW458	USA	0400243	BRINWOOD NO. 2	DELETE	CHANGE CASE NO. 85CW378
84CW459	USA	0400244	BRINWOOD NO. 3	DELETE	CHANGE CASE NO. 85CW377
84CW460	USA	0400245	BRINWOOD NO. 4	DELETE	CHANGE CASE NO. 85CW365
84CW461	USA	0400246	BRINWOOD NO. 5	DELETE	CHANGE CASE NO. 85CW342

84-CW-204
Exhibit A

ABANDONMENT LIST COURT CASES BY CASE NO.

CASE NO	NAME	SEQ NO	STRUCTURE NAME	ACTION	COMMENTS
84CW459	USA	0400244	BRINWOOD NO. 3	DELETE	CHANGE CASE NO. 85CW377
84CW460	USA	0400245	BRINWOOD NO. 4	DELETE	CHANGE CASE NO. 85CW385
84CW461	USA	0400246	BRINWOOD NO. 5	DELETE	CHANGE CASE NO. 85CW342
84CW462	USA	0400256	STEAD DITCH	DELETE	CHANGE CASE NO. 85CW376
84CW463	USA	0400257	BEAVER CREEK DITCH	DELETE	STIPULATION WITH DE
84CW464	USA	0400259	HALLOWAY PARK PL 2	DELETE	CHANGE CASE NO. 85CW375
84CW465	USA	0400289	HALLOWAY PARK PL 2	DELETE	CHANGE CASE NO. 85CW374
84CW466	USA	0400318	SPRAGUE DITCH	DELETE	CHANGE CASE NO. 85CW351
84CW467	STERLING	6400055	CITY DITCH	WITHDREW PROT	
84CW469	OHLMAN	0800155	CRAWFORD DITCH	MODIFY	MODIFY AMOUNT ABANDONED
84CW471	BROOMFIELD	0700128	BROOMFIELD RESERVOIR	DELETE	COURT HEARING ON PROTEST
84CW471	BROOMFIELD	0700129	BROOMFIELD RESERVOIR	DELETE	COURT HEARING ON PROTEST
84CW473	DENVER	0800277	J D WARD DITCH 2	WITHDREW PROT	
84CW474	DENVER	0800278	HOME RESERVOIR	WITHDREW PROT	
84CW475	DENVER	0800279	J D WARD DITCH 1	WITHDREW PROT	
84CW476	DENVER	0800300	J D WARD D 1 ENL	WITHDREW PROT	
84CW477	DENVER	0800349	ARMOR DITCH NO. 1	WITHDREW PROT	
84CW478	DENVER	0800350	ARMOR DITCH NO. 2	WITHDREW PROT	
84CW479	DENVER	0800375	ARMOR DITCH NO. 3	WITHDREW PROT	
84CW486	BOYD IRR. CO.	0300879	BOYD FREEMAN DITCH	DELETE	COURT HEARING ON PROTEST
84CW487	LOUKONEN BROTHERS	0600225	MESA RESERVOIR	DELETE	COURT HEARING ON PROTEST
84CW489	ENGLEWOOD	0800321	J D BROWN DITCH	DELETE	CHANGE CASE NO. 85CW324
84CW489	ENGLEWOOD	0800363	S R BROWN DITCH NO 1	DELETE	STIPULATION WITH DE
84CW489	ENGLEWOOD	0800364	S R BROWN DITCH NO 2	DELETE	STIPULATION WITH DE
84CW489	ENGLEWOOD	0800365	S R BROWN RESERVOIR	DELETE	STIPULATION WITH DE
84CW490	ENGLEWOOD	2300100	COMO RESERVOIR NO. 2	ABANDON	COURT HEARING ON PROTEST
84CW490	ENGLEWOOD	2300571	COMO RESERVOIR NO. 1	ABANDON	COURT HEARING ON PROTEST
84CW490	ENGLEWOOD	2300578	COMO RESERVOIR NO. 1	ABANDON	COURT HEARING ON PROTEST
84CW491	ENGLEWOOD	0800340	LITTLE DRY CK DITCH	WITHDREW PROT	
84CW491	ENGLEWOOD	0800390	LITTLE DRY CK ENL	DELETE	CHANGE CASE NO. 85CW324
84CW492	FARRELL	0600391	ESPY ICE CO DITCH 1	WITHDREW PROT	DUPLICATES CASE 84CW260
84CW492	FARRELL	0600392	ESPY ICE CO DITCH 2	WITHDREW PROT	DUPLICATES CASE 84CW260
84CW492	FARRELL	0600393	ESPY ICE CO DITCH 3	WITHDREW PROT	DUPLICATES CASE 84CW260
84CW493	USA	4800050	CHARLES E. LANNING D	WITHDREW PROT	
84CW494	USA	4800047	SPRINGER DITCH	WITHDREW PROT	
84CW495	USA	4800045	BEN WARREN DITCH ENL	WITHDREW PROT	
84CW496	USA	4800039	BEN WARREN DITCH	WITHDREW PROT	
84CW497	USA	8000859	MORROW PIPELINE	MODIFY	MODIFY AMOUNT ABANDONED
84CW498	USA	4800060	LANNING SPRINGER D.	WITHDREW PROT	
84CW499	USA	4800061	LONG PARK DITCH	WITHDREW PROT	
84CW500	THORNTON	0800508	HEIM WELL 1	DELETE	COURT HEARING ON PROTEST
84CW501	THORNTON	0800461	HEIM WELL 2	DELETE	COURT HEARING ON PROTEST
84CW502	THORNTON	8000680	BEAVER CREEK DITCH	ABANDON	COURT HEARING ON PROTEST
84CW503	THORNTON	8000681	KENOSHA DITCH	ABANDON	COURT HEARING ON PROTEST

84-CW-204
Exhibit A

ABANDONMENT LIST COURT CASES BY CASE NO.

CASE NO	NAME	SEQ NO	STRUCTURE NAME	ACTION	COMMENTS
84CW507	O'NEIL	0300639	CLARK DRAIN DITCH	DELETE	MOTION BY DIV. ENG.
84CW563	D'ARCEY, ET AL	0500152	MEADOW DITCH	WITHDREW PROT	DUPLICATES CASE 84CW334
84CW570	KENOSHA TROUT CLUB	8000846	LINNGER DITCH	DELETE	COURT HEARING ON PROTEST
84CW573	MC KENZIE	0600148	ALLEN HAYDEN DITCH 1	DELETE	MOTION BY DIV. ENG.
84CW573	MC KENZIE	0600149	ALLEN HAYDEN DITCH 2	DELETE	MOTION BY DIV. ENG.
84CW573	MC KENZIE	0600150	ALLEN HAYDEN DITCH 3	DELETE	MOTION BY DIV. ENG.
84CW573	MC KENZIE	0600151	ALLEN HAYDEN DITCH 4	DELETE	MOTION BY DIV. ENG.
84CW574	LAFAYETTE	0600279	LAFAYETTE RES. 1 & 2	DELETE	MOTION BY DIV. ENG.
84CW577	DENVER	0800088	FIRST ATTEMPT DITCH	DELETE	CHANGE CASE NO. 85CW325
84CW578	DENVER	0800115	SUCCESS DITCH	DELETE	CHANGE CASE NO. 85CW325
84CW579	DENVER	0800110	SNELL DITCH	DELETE	CHANGE CASE NO. 85CW325
84CW580	DENVER	0800408	BOOTH DITCH	DELETE	CHANGE CASE NO. 85CW325
84CW581	DENVER	0800410	WORKING DITCH	DELETE	CHANGE CASE NO. 85CW325
84CW582	DENVER	0800402	LEVY BOOTH WELL	DELETE	CHANGE CASE NO. 85CW325
84CW583	DENVER	0800409	WORKING DITCH NO. 2	DELETE	CHANGE CASE NO. 85CW325
84CW584	FIRST INTERSTATE BNK	0200180	LITTLE CHURCH DITCH	MODIFY	MODIFY AMOUNT ABANDONED
84CW584	FIRST INTERSTATE BNK	0200181	LITTLE CHURCH DITCH	WITHDREW PROT	
84CW584	FIRST INTERSTATE BNK	0200183	LITTLE CHURCH D. 1	WITHDREW PROT	
84CW584	FIRST INTERSTATE BNK	0200184	LITTLE CHURCH D. 2	WITHDREW PROT	
84CW590	OLSON	0500152	MEADOW DITCH	WITHDREW PROT	DUPLICATES CASE 84CW334
84CW591	SACK	0200216	GERMAN NO 7 RES.	DELETE	CHANGE CASE NO. 85CW340
84CW592	FRICO	0600359	SECT. 19 RESERVOIR	DELETE	COURT HEARING ON PROTEST
84CW593	FRICO	0700340	MARSHALL RESERVOIR	DELETE	COURT HEARING ON PROTEST
84CW594	FRICO	0200245	CLARK RESERVOIR	DELETE	CHANGE CASE NO. 85CW329
84CW595	FRICO	0200242	FOSTER NO. 2 RES.	DELETE	CHANGE CASE NO. 85CW331
84CW596	FRICO	0200233	DOUGAN RESERVOIR	DELETE	CHANGE CASE NO. 85CW332
84CW597	FRICO	0600282	SECT. 17 RESERVOIR	DELETE	CHANGE CASE NO. 85CW333
84CW598	FRICO	0600127	KINNEAR DITCH NO. 2	DELETE	COURT HEARING ON PROTEST
84CW599	FRICO	0600281	SECT. 15 RESERVOIR	DELETE	CHANGE CASE NO. 85CW334
84CW600	FRICO	0600283	SECT. 11 RESERVOIR	DELETE	CHANGE CASE NO. 85CW335
84CW601	FRICO	0700185	CROKE CANAL	WITHDREW PROT	
84CW602	FRICO	0200036	WHIPPLE DITCH	WITHDREW PROT	DUPLICATES CASE 84CW337
84CW603	FRICO	0200229	FERGUSON RESERVOIR	DELETE	CHANGE CASE NO. 85CW336
84CW604	FRICO	0200188	WHIPPLE DITCH	WITHDREW PROT	DUPLICATES CASE 84CW338
84CW605	FRICO	0200244	EAST LINE RESERVOIR	DELETE	CHANGE CASE NO. 85CW337
84CW606	FRICO	0200234	MILDRED RESERVOIR	DELETE	CHANGE CASE NO. 85CW338
84CW607	FRICO	0200241	FOSTER NO. 1 RES.	DELETE	CHANGE CASE NO. 85CW339
84CW612	SECURITY LIFE	0700283	HELEN KOLESKI LAKE 1	WITHDREW PROT	
84CW613	SECURITY LIFE	0700284	HELEN KOLESKI LAKE 2	DELETE	STIPULATION WITH DE
84CW614	SOUTH PARK VENTURE	2300579	O Y E RESERVOIR	WITHDREW PROT	DUPLICATES CASE 84CW271
84CW614	SOUTH PARK VENTURES	2300580	O Y E OUTLET DITCH	WITHDREW PROT	DUPLICATES CASE 84CW271
84CW615	SOUTH PARK VENTURE	2300940	POYNER RESERVOIR	WITHDREW PROT	DUPLICATES CASE 84CW285
84CW617	ROTH	6400011	RICE DITCH	WITHDREW PROT	
84CW618	SCOTTSDALE RANCH	0300547	CHASE DITCH	~~WITHDREW PROT~~ Del.	See ~~DUPLICATES~~ CASE 84CW423
84CW623	KIEWIT WESTERN	0603456	KIEWIT WELL 4-5745	DELETE	COURT HEARING ON PROTEST

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ABANDONMENT LIST COURT CASES BY CASE NO.

CASE NO	NAME	SEQ NO	STRUCTURE NAME	ACTION	COMMENTS
84CW614	SOUTH PARK VENTURES	2300580	O Y E OUTLET DITCH	WITHDREW PROT	DUPLICATES CASE 84CW271
84CW615	SOUTH PARK VENTURE	2300940	POYNER RESERVOIR	WITHDREW PROT	DUPLICATES CASE 84CW285
84CW617	ROTH	6400011	RICE DITCH	WITHDREW PROT	
84CW618	SCOTTSDALE RANCH	0300547	CHASE DITCH	WITHDREW PROT	DUPLICATES CASE 84CW423
84CW623	KIEWIT WESTERN	0803456	KIEWIT WELL 4-5745	DELETE	COURT HEARING ON PROTEST
84CW623	KIEWIT WESTERN	0803457	KIEWIT WELL 3-4575F	DELETE	COURT HEARING ON PROTEST
84CW623	KIEWIT WESTERN	0900058	FISCHER DITCH	WITHDREW PROT	PREVIOUS DECREE ABANDONED
84CW624	COLORADO DOW	4900057	FOSTER WELL NO. 1	DELETE	MOTION BY DIV. ENG.
84CW625	COLORADO DOW	0301057	DOWDY LAKE RES. ENL2	WITHDREW PROT	
84CW626	COLORADO DOW	0803576	COLO GAME FISH W 4	WITHDREW PROT	DUPLICATES CASE 84CW414
84CW627	COLORADO DOW	0803578	COLO GAME FISH W 6	WITHDREW PROT	DUPLICATES CASE 84CW414
84CW628	COLORADO DOW	0803579	COLO GAME FISH W 7	WITHDREW PROT	DUPLICATES CASE 84CW414
84CW629	COLORADO DOW	0803577	COLO GAME FISH 4567F	WITHDREW PROT	DUPLICATES CASE 84CW414
84CW630	COLORADO DOW	6400182	LONG ISLAND D ENL 1	DELETE	MOTION BY DIV. ENG.
84CW631	COLORADO DOW	0301056	DOWDY LAKE RES. ENL1	WITHDREW PROT	
84CW632	USA	0200254	GOOD HOPE DITCH	ABANDON	NO CHANGE FILED
84CW632	USA	0200257	RITTMAYER NO. 1 D.	ABANDON	NO CHANGE FILED
84CW632	USA	0200258	RITTMAYER NO. 2 D.	ABANDON	NO CHANGE FILED
84CW632	USA	0200259	HAZELTINE DITCH	WITHDREW PROT	
84CW632	USA	0200260	HAZELTINE DITCH	WITHDREW PROT	
84CW632	USA	0200286	GREENWOOD DITCH	ABANDON	NO CHANGE FILED
84CW632	USA	0200287	GREENWOOD DITCH	ABANDON	NO CHANGE FILED
84CW633	MAC'S MINES	0700207	EATWELL WATER RIGHT	ABANDON	COURT HEARING ON PROTEST
84CW634	ALMA, TOWN OF	2300667	ALMA TOWN CLAIM	DELETE	COURT HEARING ON PROTEST
84CW663	NEW MERCER DITCH CO	0300828	NEW MERCER DITCH	WITHDREW PROT	STIPULATION WITH DE
84CW664	KROGH	8000686	STANDERING DITCH	MODIFY	MODIFY AMOUNT ABANDONED
84CW664	KROGH	8000687	WEST DITCH	MODIFY	CHANGE CASE NO. 85CW328
84CW664	KROGH	8000688	EAST DITCH	MODIFY	CHANGE CASE NO. 85CW328
84CW665	USA	0400155	HUPPS BEAVER DITCH	WITHDREW PROT	DUPLICATES CASE 84CW452
84CW665	USA	0400161	HUPPS BEAVER DITCH	WITHDREW PROT	DUPLICATES CASE 84CW457
84CW666	USA	0803576	COLO GAME FISH W 4	WITHDREW PROT	DUPLICATES CASE 84CW414
84CW666	USA	0803577	COLO GAME FISH 4567F	WITHDREW PROT	DUPLICATES CASE 84CW414
84CW666	USA	0803578	COLO GAME FISH W 6	WITHDREW PROT	DUPLICATES CASE 84CW414
84CW666	USA	0803579	COLO GAME FISH W 7	WITHDREW PROT	DUPLICATES CASE 84CW414
84CW667	USA	0800245	WELSH DITCH	DELETE	CHANGE CASE NO. 85CW404
84CW668	USA	0800250	MELVIN DITCH	WITHDREW PROT	
84CW668	USA	0800251	MELVIN RESERVOIR	WITHDREW PROT	
84CW669	USA	0800294	J THOMAS DITCH	DELETE	CHANGE CASE NO. 85CW405
84CW669	USA	0800295	J THOMAS RESERVOIR	WITHDREW PROT	
84CW670	USA	0800407	GURTNOR HOWARTH W S	WITHDREW PROT	
84CW672	REARDON	0500044	ST VRAIN GOLD HILL	MODIFY	MODIFY AMOUNT ABANDONED
84CW678	ARAPAHOE W & S DIST	0800154	CLEONA DITCH	DELETE	CHANGE CASE NO. 84CW681
84CW678	ARAPAHOE W & S DIST	0800171	CLEONA DITCH ENL 1	DELETE	CHANGE CASE NO. 84CW681

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WATER DIVISION 1 DIST. 1 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
SCHULTZ DITCH	36	1	21.0000	21.0000	1	11/21/1895		04/01/1888
DRURY RESERVOIR NO 2	405	13	68.8700	68.8700	18	11/21/1895		10/06/1891
GEARY CREEK RES	423	21	20.9000	20.9000	2	01/15/1914	11/21/1895	11/11/1901
PERRY DITCH	340	21	5.0000	5.0000	2	01/15/1914	11/21/1895	05/28/1902
PERRY DITCH RES	429	21	23.2000	23.2000	2	01/15/1914	11/21/1895	05/28/1902
GEARY CREEK RES	424	21	81.4500	81.4500	2	01/15/1914	11/21/1895	02/15/1904
WILLOW CREEK RES 1	435	58	803.5000	803.5000	23	01/15/1914	11/21/1895	04/06/1905
CARR R 1 CARR D R SYS	438	51	708.0000	708.0000	23	01/15/1914	11/21/1895	05/23/1905
CARR DITCH	499	51	24.7800	24.7800	23	01/15/1914	11/21/1895	10/08/1905
CARR DITCH	169	51	709.2000	709.2000	28	01/13/1936	11/21/1895	10/08/1905
CARR RESERVOIR	171	51	594.0000	594.0000	23	01/15/1914	11/21/1895	10/08/1905
CARR R 1 CARR D R SYS	437	51	239.0000	239.0000	23	01/15/1914	11/21/1895	10/08/1905
CARR RESERVOIR	170	51	239.0000	239.0000	28	01/13/1936	11/02/1895	10/08/1905
CARR DITCH	347	51	95.0000	95.0000	23	01/15/1914	11/21/1895	10/08/1905
BREWER DITCH	357	6	22.0000	22.0000	2	01/15/1914	11/21/1895	06/09/1906
BREWER RES A B C	442	6	65.5000	65.5000	2	01/15/1914	11/21/1895	06/09/1906
TEW DITCH	359	13	17.5000	17.5000	23	01/15/1914	11/21/1895	07/18/1906
TEW RESERVOIR	444	13	70.0000	70.0000	23	01/15/1914	11/21/1895	07/18/1906
WILLOW CREEK RES 2	443	58	1703.5000	1703.5000	23	01/15/1914	11/21/1895	07/19/1906
KETCHAM RES D	383	49	11.5000	11.5000	2	01/15/1914	11/21/1895	04/07/1907
HENRY JOHNSON DITCH	376	28	2.2200	2.2200	2	01/15/1914	11/21/1895	10/01/1908
HENRY JOHNSON RES	456	28	41.0000	41.0000	2	01/15/1914	11/21/1895	10/01/1908
KETCHAM RES D	463	49	6.2000	6.2000	23	01/15/1914	11/21/1895	05/07/1909
L PLATTE BEAVER DRAIN SY	389	97	43.0000	43.0000	23	01/15/1914	11/21/1895	07/09/1909
L PLATTE BEAVER SEEP D 1	390	97	25.0000	25.0000	23	01/15/1914	11/21/1895	07/10/1909
MOONSHINE RESERVOIR	206	7	383.3100	383.3100	2	01/13/1936	01/05/1922	05/12/1925
MOONSHINE RESERVOIR ENL	208	7	166.6900	166.6900	2	01/13/1936	01/05/1922	12/01/1925
MOONSHINE RESERVOIR ENL	207	7	613.7700	613.7700	23	01/13/1936	01/05/1922	12/01/1925

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Aband. List
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WATER DIVISION 1 DIST. 2 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
LOOMIS DITCH	129	1	20.7000	20.7000	1	04/28/1883		12/08/1870
CLEAR SPRING DITCH	144	1	20.6720	17.5530	1	04/28/1883		04/15/1873
WHEELER DITCH	150	1	13.4500	13.4500	1	04/28/1883		04/16/1874
WHEELER DITCH	151	1	6.6800	6.6800	1	04/28/1883		06/01/1875
WHEELER DITCH	152	1	21.4200	21.4200	1	04/28/1883		05/10/1876
MAYFIELD DITCH	155	1	15.6700	15.6700	1	04/28/1883		10/15/1876
JONES DITCH	33	9	0.9900	0.9900	1	02/15/1888		12/31/1883
JONES DITCH	40	9	1.0000	1.0000	2	05/22/1918	02/15/1888	05/31/1883
LITTLE CHURCH DITCH	180	9	7.7600	6.7600	2	08/02/1918	07/08/1893	07/01/1871
LITTLE CHURCH NO 1 DITCH	183	25	6.0000	6.0000	2	08/02/1918	07/08/1893	07/08/1875
LITTLE CHURCH DITCH	181	8	6.0000	6.0000	2	08/02/1918	07/08/1893	07/08/1875
LITTLE CHURCH NO 2 DITCH	184	24	4.0000	4.0000	2	08/02/1918	07/08/1893	07/10/1875
JONES DITCH	185	9	5.8000	5.8000	2	08/02/1918	07/08/1893	09/15/1883
JONES DITCH	186	9	1.1000	1.1000	2	08/02/1918	07/08/1893	03/28/1885
ASSMUSSEN DITCH	190	25	2.3800	2.3800	2	08/02/1918	07/08/1893	05/15/1887
GERMAN NO 1 RES	211	4	44.0200	44.0200	2	08/02/1918	07/08/1893	09/12/1887
GERMAN NO 13 RES	215	4	9.0400	9.0400	2	08/02/1918	07/08/1893	11/01/1889
LUPTON SHORT LINE DITCH	192	1	72.0000	72.0000	2	08/02/1918	07/08/1893	07/06/1892
GREAT BEND NO 2 RES	174	1	803.4800	803.4800	2	11/27/1906	07/08/1893	07/23/1897
GREAT BEND NO 1 RES	172	1	189.9900	189.9900	2	11/27/1906	07/08/1893	07/23/1897
GREAT BEND NO 3 RES	176	1	252.5200	252.5200	2	11/27/1906	07/08/1893	07/23/1897
GREAT BEND NO 5 RES	177	1	390.0000	390.0000	2	11/27/1906	07/08/1893	03/10/1898
STERLING RES	228	1	216.6000	216.6000	2	08/02/1918	07/08/1893	09/01/1898
GERMAN NO 14 RES	217	4	12.7400	12.7400	2	08/02/1918	07/08/1893	12/01/1900
GERMAN NO 15 RES	219	4	0.7500	0.7500	2	08/02/1918	07/08/1893	09/01/1902
GERMAN NO 10 RES	220	4	19.2500	19.2500	2	08/02/1918	07/08/1893	09/01/1904
GREAT BEND NO 2 RES	175	1	991.2500	991.2500	2	11/27/1906	07/08/1893	01/04/1906
GREAT BEND NO 5 RES	178	1	236.8800	236.8800	2	11/27/1906	07/08/1893	01/04/1906
GREAT BEND NO 1 RES	173	1	238.3200	238.3200	2	11/27/1906	07/08/1893	01/04/1906
HOLLINGSHEAD SEEPAGE D	252	23	2.5000	2.5000	2	11/12/1924	08/02/1918	07/01/1890
BARTELS DITCH	256	23	6.0000	6.0000	2	11/12/1924	08/02/1918	02/17/1898
BARTELS RES	5	23	75.0000	75.0000	2	11/12/1924	08/02/1918	02/17/1898
HAZELTINE DITCH	260	12	10.0000	10.0000	23	11/12/1924	08/02/1918	05/18/1901
HAZELTINE DITCH	259	12	10.0000	10.0000	2	11/12/1924	08/02/1918	05/18/1901
THOMAS DITCH NO 2	267	3	1.2900	1.2900	2	11/12/1924	08/02/1918	12/07/1903
BRANTNER NO 1 RES	8	6	2.6000	2.6000	2	11/12/1924	08/02/1918	03/01/1905
AKERS DITCH	269	15	7.5000	7.5000	2	11/12/1924	08/02/1918	05/27/1907
FORT	12	20	164.5500	164.5500	2	11/12/1924	08/02/1918	07/17/1907
BETZ DITCH	270	95	3.2000	3.2000	2	11/12/1924	08/02/1918	04/15/1908
DAYTON DITCH	272	23	4.5000	4.5000	2	11/12/1924	08/02/1918	04/15/1909
AHERN NO 1 DITCH	273	21	25.0000	25.0000	2	11/12/1924	08/02/1918	05/21/1909
AHERN NO 2 DITCH	274	21	25.0000	25.0000	2	11/12/1924	08/02/1918	05/21/1909
DONALDSON DITCH	279	23	2.5000	2.5000	2	11/12/1924	08/02/1918	06/01/1912
GUYER DITCH	278	23	2.0000	2.0000	2	11/12/1924	08/02/1918	06/01/1912
MOUNTAIN VIEW DITCH	280	10	10.2700	10.2700	2	11/12/1924	08/02/1918	10/04/1914
MONTGOMERY MATHIS SEEP D	283	97	1.0000	1.0000	2	11/12/1924	08/02/1918	06/01/1916
SPINNER DITCH	285	6	1.5000	1.5000	2	11/12/1924	08/02/1918	11/20/1916
EDWARDS SUMP PL DCHS 1 2	289	18	1.0000	1.0000	2	11/12/1924	08/02/1918	02/11/1918
ELLEDGE DITCH	291	95	3.0000	3.0000	2	11/12/1924	08/02/1918	11/30/1918
EDWARDS SUMP PL DCHS 1 2	290	18	3.0000	3.0000	2	11/12/1924	08/02/1918	06/15/1919

WATER DIVISION 1 DIST. 3 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
MILL POWER CANAL	1034	9	160.0000	160.0000	1	04/11/1882		07/01/1871
VANDEWARK DITCH	539	9	10.1700	10.1700	1	04/11/1882		05/01/1874
WILLIAM CALLOWAY D NO 2	533	46	14.1700	8.1700	1	04/11/1882		01/28/1875
ABRAM WASHBURN D NO 1	559	12	9.5700	9.5700	1	04/11/1882		04/15/1878
CARTER COTTON MILL RACE	554	9	127.3000	127.3000	1	04/11/1882		04/01/1879
ABRAM WASHBURN D NO 2	553	12	15.4300	15.4300	1	04/11/1882		04/15/1879
MCNEY CHASE DITCH	552	46	3.4000	3.4000	1	04/11/1882		09/01/1879
CARTER COTTON MILL RACE	555	9	37.1700	37.1700	1	04/11/1882		12/31/1879
NEW MERCER DITCH	828	9	136.0000	85.5300	1	04/11/1882		02/15/1880
CHASE DITCH	547	46	21.4100	10.7050	1	04/11/1882		07/07/1880
EAGLE NEST RANCH D	808	46	5.0200	5.0200	1	04/11/1882		10/01/1881
SPRING CANON RESERVOIR	995	68	62.0000	62.0000	1	12/09/1904		12/07/1882
HARRIS DITCH NO 1	799	2	1.5000	1.5000	2	04/22/1922	04/11/1884	04/30/1875
SPRING CREEK DITCH	759	68	10.0000	10.0000	2	04/22/1922	04/11/1884	01/02/1888
R E DOTTS DITCH	755	7	1.2500	1.2500	2	04/22/1922	04/11/1884	03/15/1889
TIMBERLINE RESERVOIR	949	4	426.0000	426.0000	1	06/15/1906		08/13/1901
TIMBERLINE R 1ST ENL	948	4	336.0000	336.0000	1	06/15/1906		06/01/1904
ELDER RESERVOIR	942	9	2296.0000	796.0000	1	06/15/1906		07/10/1904
SPRING CANON RESERVOIR	994	68	85.0000	85.0000	2	04/22/1922	12/09/1904	02/10/1903
DOWDY LAKE RES 1ST ENL	1056	66	974.0000	263.0000	2	04/22/1922	12/09/1904	06/09/1906
GREELEY POUDRE CANAL	651	9	92.0000	92.0000	2	05/03/1930	04/11/1882	04/01/1907
GREELEY POUDRE CANAL	652	9	500.0000	500.0000	2	05/03/1930	04/11/1882	04/01/1907
FINLEY SEEPAGE DITCH	644	97	2.0000	2.0000	2	04/22/1922	04/11/1884	02/18/1908
PARK CREEK R 1	911	50	4.0000	4.0000	2	04/22/1922	12/09/1904	03/01/1910
ALPERT RESERVOIR	909	50	14.0000	14.0000	2	04/22/1922	12/09/1904	03/01/1911
GILMORE RESERVOIR	907	18	344.0000	344.0000	2	04/22/1922	12/09/1904	01/22/1919
DOWDY LAKE RES 2ND ENL	1057	66	760.0000	760.0000	2	05/03/1930	12/09/1904	01/24/1919
LARIMER COUNTY DITCH ENL	543	9	326.0000	79.5500	2	12/18/1945	04/22/1922	09/28/1914
ELMER E KEACH SEEP WATER	463	97	3.0000	3.0000	2	12/18/1945	04/22/1922	05/01/1928
WILLIAMS DITCH NO 1	462	97	4.2500	4.2500	2	12/18/1945	04/22/1922	05/05/1928
MCCLELLAND DITCH	602	40	3.0000	3.0000	2	09/10/1953	12/18/1945	06/01/1895
MORSMAN HARRIS SEEP DR D	524	97	6.0000	6.0000	2	09/10/1953	12/18/1945	08/20/1895
PENNOCK DITCH	590	33	6.0000	6.0000	2	09/10/1953	12/18/1945	05/01/1903
WESTERDOLL DITCH	516	97	5.0000	5.0000	2	09/10/1953	12/18/1945	04/11/1920
WESTERDOLL DITCH EXT	515	97	5.0000	5.0000	2	09/10/1953	12/18/1945	06/26/1920
FAATZ DRAINAGE DITCH	574	40	0.5000	0.5000	2	09/10/1953	12/18/1945	04/03/1950

WATER DIVISION 1 DIST. 3 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
MILL POWER CANAL	1034	9	160.0000	160.0000	1	04/11/1882		07/01/1871
VANDEWARK DITCH	539	9	10.1700	10.1700	1	04/11/1882		05/01/1874
WILLIAM CALLOWAY D NO 2	533	46	14.1700	8.1700	1	04/11/1882		01/28/1875
ABRAM WASHBURN D NO 1	559	12	9.5700	9.5700	1	04/11/1882		04/15/1878
CARTER COTTON MILL RACE	554	9	127.3000	127.3000	1	04/11/1882		04/01/1879
ABRAM WASHBURN D NO 2	553	12	15.4300	15.4300	1	04/11/1882		04/15/1879
MCNEY CHASE DITCH	552	46	3.4000	3.4000	1	04/11/1882		09/01/1879
CARTER COTTON MILL RACE	555	9	37.1700	37.1700	1	04/11/1882		12/31/1879
NEW MERCER DITCH	828	9	136.0000	85.5300	1	04/11/1882		02/15/1880
~~CHASE DITCH~~	~~547~~	~~46~~	~~21.4100~~	~~10.7050~~	~~1~~	~~04/11/1882~~		~~07/07/1880~~
EAGLE NEST RANCH D	808	46	5.0200	5.0200	1	04/11/1882		10/01/1881
SPRING CANON RESERVOIR	995	68	62.0000	62.0000	1	12/09/1904		12/07/1882
HARRIS DITCH NO 1	799	2	1.5000	1.5000	2	04/22/1922	04/11/1884	04/30/1875
SPRING CREEK DITCH	759	68	10.0000	10.0000	2	04/22/1922	04/11/1884	01/02/1888
R E DOTTS DITCH	755	7	1.2500	1.2500	2	04/22/1922	04/11/1884	03/15/1889
TIMBERLINE RESERVOIR	949	4	426.0000	426.0000	1	06/15/1906		08/13/1901
TIMBERLINE R 1ST ENL	948	4	336.0000	336.0000	1	06/15/1906		06/01/1904
ELDER RESERVOIR	942	9	2296.0000	796.0000	1	06/15/1906		07/10/1904
SPRING CANON RESERVOIR	994	68	85.0000	85.0000	2	04/22/1922	12/09/1904	02/10/1903
DOWDY LAKE RES 1ST ENL	1056	66	974.0000	263.0000	2	04/22/1922	12/09/1904	06/09/1906
GREELEY POUDRE CANAL	651	9	92.0000	92.0000	2	05/03/1930	04/11/1882	04/01/1907
GREELEY POUDRE CANAL	652	9	500.0000	500.0000	2	05/03/1930	04/11/1882	04/01/1907
FINLEY SEEPAGE DITCH	644	97	2.0000	2.0000	2	04/22/1922	04/11/1884	02/18/1908
PARK CREEK R 1	911	50	4.0000	4.0000	2	04/22/1922	12/09/1904	03/01/1910
ALPERT RESERVOIR	909	50	14.0000	14.0000	2	04/22/1922	12/09/1904	03/01/1911
GILMORE RESERVOIR	907	18	344.0000	344.0000	2	04/22/1922	12/09/1904	01/22/1919
DOWDY LAKE RES 2ND ENL	1057	66	760.0000	760.0000	2	05/03/1930	12/09/1904	01/24/1919
LARIMER COUNTY DITCH ENL	543	9	326.0000	79.5500	2	12/18/1945	04/22/1922	09/28/1914
ELMER E KEACH SEEP WATER	463	97	3.0000	3.0000	2	12/18/1945	04/22/1922	05/01/1928
WILLIAMS DITCH NO 1	462	97	4.2500	4.2500	2	12/18/1945	04/22/1922	05/05/1928
MCCLELLAND DITCH	602	40	3.0000	3.0000	2	09/10/1953	12/18/1945	06/01/1895
MORSMAN HARRIS SEEP DR D	524	97	6.0000	6.0000	2	09/10/1953	12/18/1945	08/20/1895
PENNOCK DITCH	590	33	6.0000	6.0000	2	09/10/1953	12/18/1945	05/01/1903
WESTERDOLL DITCH	516	97	5.0000	5.0000	2	09/10/1953	12/18/1945	04/11/1920
WESTERDOLL DITCH EXT	515	97	5.0000	5.0000	2	09/10/1953	12/18/1945	06/26/1920
FAATZ DRAINAGE DITCH	574	40	0.5000	0.5000	2	09/10/1953	12/18/1945	04/03/1950

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WATER DIVISION 1 DIST. 4 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
BUCKHORN RESERVOIR	1	10	1189.5000	1189.5000	2	11/14/1939	04/01/1931	06/30/1921
HILL BRUSH DITCH	128	7	61.8010	34.8010	1	05/28/1883		06/30/1866
GEORGE RIST DITCH	52	7	195.0000	122.0000	1	05/28/1883		05/01/1873
OSBORNE CAYWOOD DITCH	41	29	16.6400	11.6400	1	05/28/1883		03/10/1875
BIG T PLATTE R D	124	7	86.1800	26.1800	1	05/28/1883		05/15/1876
EAGLE DITCH	62	29	15.6000	7.6000	1	05/28/1883		03/01/1877
LOUDEN DITCH	49	7	154.3000	31.3000	1	05/28/1883		11/01/1877
HILLSBOROUGH DITCH	57	7	99.4600	45.4600	1	05/28/1883		04/15/1878
NEVILLE DITCH	66	10	3.1200	3.1200	1	05/28/1883		04/25/1879
PIONEER DITCH	79	7	5.0000	5.0000	2	03/18/1892	05/28/1883	12/01/1872
LOUDEN DITCH	51	7	123.4780	123.4780	1	05/29/1884		09/17/1883
ESTES PARK DITCH NO 1	87	7	7.0000	7.0000	2	06/29/1916	03/22/1890	05/15/1870
RUTHERFORD DITCH	91	10	3.0000	3.0000	2	06/29/1916	03/22/1890	05/15/1872
ESTES PARK DITCH NO 5	88	18	6.9000	6.9000	2	06/29/1916	03/22/1890	05/15/1876
ESTES PARK DITCH NO 6	89	18	13.2000	13.2000	2	06/29/1916	03/22/1890	01/02/1879
ESTES PARK DITCH NO 2	197	7	12.0000	12.0000	2	06/29/1916	03/22/1890	05/15/1879
ESTES PARK DITCH NO 3	198	8	7.0000	7.0000	2	06/29/1916	03/22/1890	05/15/1880
ESTES PARK DITCH NO 4	90	7	3.2000	3.2000	2	06/29/1916	03/22/1890	05/15/1882
BADGER DITCH	81	14	8.3300	8.3300	2	10/26/1900	03/22/1890	04/25/1884
CLEAVE DITCH	105	16	4.0000	4.0000	2	06/29/1916	03/22/1890	06/20/1888
DRY CREEK DITCH	162	14	5.0000	5.0000	2	06/29/1916	03/22/1890	06/10/1889
CARTER DITCH	84	10	5.0000	3.0000	2	06/29/1916	03/22/1890	11/30/1889
MINER LONGAN DITCH	167	29	40.8000	32.8000	2	06/29/1916	03/22/1890	08/23/1893
CARTER DITCH	85	10	2.8000	2.8000	2	06/29/1916	03/22/1890	10/10/1896

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WATER DIVISION 1 DIST. 5 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
N M L INS CLAIM DITCH	6	30	3.9600	3.9600	1	06/02/1882		12/31/1860
BACONS APPROPRIATION D	13	45	37.3700	37.3700	1	06/02/1882		06/01/1861
ST VRAIN GOLD HILL	44	42	22.8500	20.8500	1	06/02/1882		10/25/1863
L H DICKSON DITCH	47	45	9.1300	9.1300	1	06/02/1882		02/28/1864
DICKENS PRIVATE D NO 2	136	8	11.3100	7.3700	1	06/02/1882		04/01/1880
LUTHER D NOS	163	21	10.0000	8.0000	2	03/13/1907	06/02/1882	04/01/1875
WELTY LAKE	284	45	191.0000	191.0000	2	03/13/1907	06/02/1882	10/01/1879
WILLIAM H DICKENS D	142	14	7.8000	5.8000	2	10/21/1902	06/02/1882	11/01/1882
DELEHANT RES	299	45	27.0000	27.0000	2	03/13/1907	06/02/1882	01/02/1889
DOYLE REESE RES	306	45	49.0000	49.0000	2	03/13/1907	06/02/1882	04/01/1891
WISWALL DITCH	148	14	6.8900	4.8900	2	10/21/1902	06/02/1882	11/10/1892
APEX RES	314	45	164.0000	164.0000	2	03/13/1907	06/02/1882	12/20/1892

WATER DIVISION 1 DIST. 6 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
WILLIAM BREACH DITCH	60	8	2.0000	2.0000	1	06/02/1882		06/01/1862
M G SMITH DITCH	62	8	15.0000	15.0000	1	06/02/1882		06/01/1862
RURAL DITCH	46	8	175.5400	115.2900	1	06/02/1882		03/10/1863
DRY CREEK NO 2 DITCH	86	45	69.0000	21.1900	1	06/02/1882		05/01/1864
HOWELL BEASLEY DITCH	96	8	28.8000	28.8000	1	06/02/1882		03/01/1865
DELEHANT TOM DITCH	102	8	37.1200	27.1200	1	06/02/1882		05/01/1865
ENTERPRISE 1 ENL DITCH	91	45	6.6800	6.6800	1	06/02/1882		05/01/1866
TAYLOR DITCH	117	8	10.7100	10.7100	1	06/02/1882		04/01/1870
BOULDER WHITE ROCK DITCH	133	8	190.5800	55.5800	1	06/02/1882		11/01/1873
FOUR MILE CANYON DITCH	137	23	76.5600	76.5600	1	06/02/1882		04/01/1875
SIX MILE BOTTOM DITCH	138	30	48.8000	48.8000	1	06/02/1882		04/01/1875
N BR SIX MILE BOTTOM D	139	30	48.8000	48.8000	1	06/02/1882		04/01/1875
BOULDER LEFT HAND D ENLG	136	8	81.0000	81.0000	1	06/02/1882		04/01/1876
FORBES DITCH	143	23	60.6600	60.6600	1	06/02/1882		04/01/1878
WELLMAN DITCH	144	8	12.7400	12.7400	1	06/02/1882		05/01/1878
MATHEWS DITCH	145	8	60.6000	60.6000	1	06/02/1882		02/13/1879
ENTERPRISE 2 ENL DITCH	92	45	13.4900	13.4900	1	06/02/1882		06/01/1881
REVOLUTION DITCH	115	8	99.9700	49.9700	1	06/02/1882		12/07/1881
MINKS AUTREY DITCH	188	11	9.0000	9.0000	2	03/13/1907	04/10/1905	10/30/1865
IDAHO DITCH	187	29	9.7800	9.7800	2	03/13/1907	04/10/1905	10/30/1870
WALLACE DITCH	181	11	9.0000	9.0000	2	03/13/1907	04/10/1905	05/11/1872
HOWER DITCH	180	43	48.6000	48.6000	2	03/13/1907	04/10/1905	11/01/1872
SILVER LAKE	178	8	20.0000	10.0000	2	03/13/1907	04/10/1905	02/28/1888
RECLUSE DITCH	196	37	39.0600	39.0600	2	03/13/1907	04/10/1905	09/01/1888
JASPER RES	260	31	820.0000	495.6000	2	03/13/1907	04/10/1905	07/25/1896
SILVER LAKE 1ST ENLG	179	8	25.0000	25.0000	2	03/13/1907	04/10/1905	11/01/1900
S BOULDER FOOTHILL DITCH	159	45	20.0000	20.0000	2	06/21/1926	03/13/1907	12/31/1883
WILLIAM VIELE DITCH	210	5	18.6000	18.6000	2	06/21/1926	03/13/1907	12/31/1901
PANAMA RESERVOIR NO 1	316	8	7000.0000	2011.0000	2	06/21/1926	03/13/1907	05/31/1904
GREEN LAKE RES NO 4	488	2	57.7600	57.7600	28	06/21/1926	03/13/1907	10/02/1906
GREEN LAKE RES NO 4	487	2	389.5100	389.5100	23	06/21/1926	03/13/1907	10/02/1906
ORDEL DITCH PIPELINE	430	8	150.0000	150.0000	13	11/03/1909		05/25/1907
ALAMONTE DITCH	429	8	90.0000	90.0000	13	11/03/1909		07/22/1907

WATER DIVISION 1 DIST. 7 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
RAND	405	23	4.0000	4.0000	1	10/04/1884		04/27/1867
EATWELL WATER RIGHT	207	37	100.0000	100.0000	1	10/09/1914		04/10/1870
SEATON MOUNTAIN DITCH	430	53	191.0000	191.0000	1	10/09/1914		12/31/1875
MASON	341	56	42.2000	42.2000	1	10/09/1914		05/13/1882
CHAMPION TRIO MILL	152	53	16.6000	16.6000	1	10/09/1914		12/31/1885
GEORGE R STEWART PL	232	48	3.3300	3.3300	1	10/09/1914		10/04/1889
VALLEY VIEW DITCH 3	491	28	13.0000	13.0000	1	10/09/1914		02/21/1893
VALLEY VIEW DITCH 2	490	28	24.1000	24.1000	1	10/09/1914		02/21/1893
VALLEY VIEW DITCH 1	489	28	12.6000	12.6000	1	10/09/1914		02/21/1893
VALLEY VIEW DITCH 4	492	28	12.0000	12.0000	1	10/09/1914		02/21/1893
HENRY LEE SOUTH	286	11	39.3500	39.3500	2	05/13/1936	10/09/1895	07/04/1876
CROSLEY AND WESTFIELD	186	11	78.0000	78.0000	2	05/13/1936	10/09/1895	02/01/1881
SCHOOL LAKE RESERVOIR	424	11	281.0000	281.0000	2	05/13/1936	10/09/1895	05/01/1882
GOLDEN CITY RALSTON CR	249	11	88.2700	88.2700	23	05/13/1936	10/09/1895	03/16/1886
BROWN	130	11	33.7800	33.7800	2	05/13/1936	10/09/1895	12/31/1886
FUNK	228	11	27.2300	27.2300	2	05/13/1936	10/09/1895	12/31/1886
LARSON RESERVOIR	315	11	9.0900	9.0900	2	05/13/1936	10/09/1895	01/01/1887
JOINT RESERVOIR	302	11	106.7150	106.7150	26	05/13/1936	10/09/1895	03/01/1887
DIERKS 1	197	11	2.4500	2.4500	2	05/13/1936	10/09/1895	01/01/1888
DIERKS 2	198	11	6.0000	6.0000	2	05/13/1936	10/09/1895	01/01/1888
CLOVER KNOLL	173	11	71.8200	71.8200	2	05/13/1936	10/09/1895	02/11/1888
SOUTH CLOVER KNOLL	175	11	30.5200	30.5200	2	05/13/1936	10/09/1895	02/11/1888
KINGSBURY RESERVOIR	312	11	2.3900	2.3900	2	05/13/1936	10/09/1895	09/01/1888
WESLEY CHAPEL RES	514	11	8.8600	8.8600	2	05/13/1936	10/09/1895	12/31/1888
HELEN KOLESKI LAKE 1	283	11	2.2900	2.2900	2	05/13/1936	10/09/1895	12/31/1888
HOME RESERVOIR 2	288	11	1.7100	1.7100	2	05/13/1936	10/09/1895	10/15/1890
GOLDEN CITY RALSTON CR	250	42	315.0000	315.0000	237	05/13/1936	10/09/1895	12/05/1892
LINSCOTT RESERVOIR	325	11	21.6600	21.6600	2	05/13/1936	10/09/1895	02/01/1893
DUNPHY RESERVOIR	201	11	41.6300	41.6300	2	05/13/1936	10/09/1895	01/01/1895
FITZGERALD RESERVOIR	224	11	18.6400	18.6400	2	05/13/1936	10/09/1895	01/01/1895
GANGL RES GANGL LATERAL	230	11	1.3700	1.3700	2	05/13/1936	10/09/1895	02/01/1895
ANSON P STEPHENS DITCH 2	458	53	150.0000	150.0000	1	10/09/1914		04/01/1901
WESTMINSTER ORCHARDS	515	11	0.9600	0.9600	2	05/13/1936	10/09/1895	01/13/1902
STONEHOUSE RES NO 2	530	11	2.8000	2.8000	2	05/13/1936	10/09/1895	02/01/1902
STONEHOUSE RES 1	464	11	2.7000	2.7000	2	05/13/1936	10/09/1895	02/01/1902
CROKE CANAL	185	11	1056.0000	1056.0000	23	05/13/1936	10/09/1895	03/04/1902
SLIME MILL	446	37	19.5000	19.5000	1	10/09/1914		04/02/1902
RESERVE RESERVOIR	412	55	5170.0000	5170.0000	1	10/09/1914		10/06/1905
CHAMPION TRIO MILL	153	53	33.4000	33.4000	1	10/09/1914		11/01/1906
PAVLINIC RESERVOIR	384	11	3.0990	3.0990	2	05/13/1936	10/09/1895	10/01/1910
EPPINGER RESERVOIR	214	11	1.8300	1.8300	2	05/13/1936	10/09/1895	02/01/1925

WATER DIVISION 1 DIST. 8 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
SMITH CANAL	28	1	5.2000	5.2000	1	12/10/1883		12/01/1863
FIFTY NINE DITCH 2	38	38	9.0000	4.5000	1	12/10/1883		12/31/1863
CHATHAM DITCH	41	20	5.0000	5.0000	1	12/10/1883		12/30/1864
SUNNY BANK DITCH	65	20	1.8300	1.8300	1	12/10/1883		06/01/1866
SMITH CANAL 1ST ENL	69	1	37.3700	37.3700	1	12/10/1883		12/30/1866
KELLY DITCH	70	38	2.5200	2.5200	1	12/10/1883		03/20/1867
FIFTY NINE DITCH 2	76	38	4.5000	4.5000	1	12/10/1883		07/30/1867
HAPPY CANYON RES D	123	25	3.0000	3.0000	1	12/10/1883		04/01/1873
CANN DITCH NO 1	122	39	2.0000	2.0000	1	12/10/1883		04/30/1873
FRENCH DITCH	128	26	3.0000	3.0000	1	12/10/1883		06/30/1873
BURROWS DITCH	143	38	2.4800	2.4800	1	12/10/1883		06/30/1874
SMITH CANAL 2ND ENL	145	62	7.4300	7.4300	1	12/10/1883		12/30/1874
MURMUR DITCH	149	8	3.2500	3.2500	1	12/10/1883		03/30/1875
PERRY DITCH	153	38	1.4700	1.4700	1	12/10/1883		06/30/1875
CRAWFORD DITCH	155	8	5.0000	3.0000	1	12/10/1883		06/30/1875
CANN DITCH NO 2	156	39	1.8300	1.8300	1	12/10/1883		10/30/1875
SMITH CANAL 3RD ENL	174	1	7.5700	7.5700	1	12/10/1883		07/30/1878
HAPPY CANYON RES D	179	25	0.8000	0.8000	1	12/10/1883		03/10/1879
STEVENS DITCH	191	38	7.5600	7.5600	1	12/10/1883		12/30/1879
RESERVOIR DITCH	196	17	8.2400	8.2400	1	12/10/1883		03/03/1880
GLYN PLYM NO 2	206	13	12.0000	12.0000	1	12/10/1883		05/30/1881
PHELAN DITCH	208	17	2.7300	2.7300	1	12/10/1883		08/01/1881
J BYRON TUCKER D	210	8	4.3600	4.3600	1	12/10/1883		11/01/1881
HILL DITCH	212	20	2.0000	2.0000	1	12/10/1883		01/01/1882
ANTELOPE DITCH	215	2	3.8500	3.8500	1	12/10/1883		03/31/1882
BAULDORF DITCH	248	8	6.0000	6.0000	2	03/03/1890	12/10/1883	05/31/1886
UPTON T SMITH RES 1	249	46	4.0000	4.0000	2	03/03/1890	12/10/1883	02/01/1887
MELVIN RESERVOIR	251	8	21.0000	21.0000	2	03/03/1890	12/10/1883	02/17/1887
MELVIN DITCH	250	8	12.0000	12.0000	2	03/03/1890	12/10/1883	02/18/1887
STEVENS RES 2 AND 3	255	49	110.1000	110.1000	2	03/03/1890	12/10/1883	05/01/1887
STEVENS RES 4	260	49	21.0000	21.0000	2	03/03/1890	12/10/1883	05/01/1888
UPTON T SMITH RES 5	264	46	8.0000	8.0000	2	03/03/1890	12/10/1883	08/15/1889
ARAPAHOE DITCH	266	8	50.0000	50.0000	2	03/03/1890	12/10/1883	09/01/1889
CASTLEWOOD RESERVOIR	265	8	5227.0000	5227.0000	2	03/03/1890	12/10/1883	09/01/1889
MCINTYRE DITCH 1	280	28	3.2500	3.2500	2	05/23/1904	03/03/1890	10/31/1871
MCINTYRE DITCH 2	281	28	3.2500	3.2500	2	05/23/1904	03/03/1890	06/30/1872
J D WARD DITCH 2	277	44	7.5000	7.5000	2	12/01/1900	03/03/1890	11/17/1881
HOME RESERVOIR	278	44	34.0000	34.0000	2	12/01/1900	03/03/1890	11/17/1881
J D WARD DITCH 1	279	44	1.5000	1.5000	2	12/01/1900	03/03/1890	12/31/1881
CONEHAY DITCH 1	276	8	4.2500	1.4000	2	11/28/1892	03/03/1890	08/19/1892
COLEMAN PL PP	288	28	0.0000	0.0000	2	05/23/1904	03/03/1890	11/30/1900
OLD SEVENTY FOUR D	297	8	4.0000	4.0000	2	05/21/1913	05/23/1904	12/31/1872
PRESHAW DITCH	386	3	2.0000	2.0000	2	06/16/1930	05/23/1904	04/20/1875
COLUMBINE DITCH	313	15	0.7000	0.7000	2	06/09/1924	05/23/1904	07/01/1876
PL TO WATER TK(ACEQUIA)	424	52	0.1560	0.1560	2	06/16/1930	05/23/1904	03/15/1878
SANDERSON DITCH	387	44	2.7500	2.7500	2	06/16/1930	05/23/1904	05/01/1879
MCKENNEY DITCH NO 2	314	14	1.0000	1.0000	2	06/09/1924	05/23/1904	03/01/1882
ANDERSON DITCH	392	15	0.7500	0.7500	2	06/16/1930	05/23/1904	06/19/1882
WOODHOUSE DITCH	316	38	0.7400	0.7400	2	06/09/1924	05/23/1904	05/01/1884
WILLIAMSON DITCH	328	13	4.5000	4.5000	2	06/09/1924	05/23/1904	10/04/1886
J THOMAS RESERVOIR	295	11	6.0000	6.0000	2	11/06/1909	05/23/1904	10/05/1886

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WATER DIVISION 1 DIST. 8 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
SPRING GULCH DITCH	331	47	1.0000	1.0000	2	06/09/1924	05/23/1904	05/01/1887
FEARNLEY DITCH	292	44	1.3800	1.3800	2	12/17/1906	05/23/1904	05/31/1887
PEABODY DITCH	337	15	2.0000	2.0000	2	06/09/1924	05/23/1904	02/11/1888
FEARNLEY DITCH ENL	338	44	2.5900	2.5900	2	06/09/1924	05/23/1904	03/01/1888
LITTLE DRY CREEK DITCH	340	31	0.7500	0.7500	2	06/09/1924	05/23/1904	01/14/1889
PEABODY RESERVOIR	341	15	2.0000	2.0000	2	06/09/1924	05/23/1904	06/01/1889
ASH RESERVOIR	348	33	1.0000	1.0000	2	06/09/1924	05/23/1904	11/30/1891
ASH DITCH	347	33	2.0000	2.0000	2	06/09/1924	05/23/1904	11/30/1891
ARMOR DITCH NO 2	350	1	0.7500	0.7500	2	06/09/1924	05/23/1904	04/01/1892
ARMOR DITCH NO 1	349	1	0.7500	0.7500	2	06/09/1924	05/23/1904	04/01/1892
WILLIAMSON DITCH ENL	356	13	2.5000	2.5000	2	06/09/1924	05/23/1904	06/01/1898
MCKENNEY DITCH NO 1	358	40	2.5000	2.5000	2	06/09/1924	05/23/1904	03/01/1901
J D WARD DITCH 1 ENL	300	44	3.0000	3.0000	2	12/02/1912	05/23/1904	03/04/1901
CANNON PENROSE DITCH	359	40	4.5000	4.5000	2	06/09/1924	05/23/1904	03/20/1902
PLUM CREEK FEEDER D	360	38	400.0000	400.0000	2	06/09/1924	05/23/1904	12/31/1903
BARROWS RESERVOIR	367	15	3.0000	3.0000	2	06/09/1924	05/23/1904	06/01/1907
MITCHELL RESERVOIR	372	36	82.0000	82.0000	2	06/16/1930	05/23/1904	09/01/1910
ARMOR DITCH NO 3	375	1	0.7500	0.7500	2	06/09/1924	05/23/1904	07/14/1911
BLONGER DITCH	376	15	0.8750	0.8750	2	06/09/1924	05/23/1904	09/01/1911
STARKWEATHER DITCH	377	97	0.7500	0.7500	2	06/09/1924	05/23/1904	06/01/1915
LUNN SEEPAGE DITCH	379	15	2.5000	2.5000	2	06/09/1924	05/23/1904	07/01/1915
FRANKS DITCH	403	18	2.8800	2.8800	2	06/16/1930	05/23/1904	07/01/1918
J H PAYNE DITCH NO 1	391	31	8.0000	8.0000	2	06/16/1930	06/09/1924	05/27/1886
CLEARFIELD RES 1 2 3 4	404	44	10.0000	10.0000	2	06/16/1930	06/09/1924	02/10/1920
BOEGEL RESERVOIR	406	3	10.6000	10.6000	2	06/16/1930	05/23/1904	04/01/1926
GURTNOR HOWARTH W SYS	407	97	4.0000	4.0000	23	06/16/1930	05/23/1904	03/18/1927
BAIRD OUTLET-SUPPLY D	504	55	4.0000	4.0000	2	05/18/1972	06/16/1930	07/23/1908
BAIRD RES 3	452	55	35.2000	35.2000	2	05/18/1972	06/16/1930	07/23/1908
LIEBHARDT DITCH NO 2	412	97	1.8000	1.8000	2	06/13/1932	06/16/1930	08/01/1913
LIEBHARDT DITCH NO 1	411	24	1.8000	1.8000	2	06/13/1932	06/16/1930	08/01/1913
PINE CR HIGHLANDS LAKE 1	1007	200	8.0000	8.0000	2	05/18/1972	06/16/1930	05/30/1930
JACKSON WELL 2-013634-F	1686	99	0.0220	0.0220	1	12/31/1971		08/25/1952
LEW HAMMER INC WELL 1	3306	99	0.2610	0.2610	1	12/31/1972		07/01/1953
JACKSON WELL 1-013633-F	1685	99	0.0780	0.0780	1	12/31/1971		05/02/1957
PINE CR HIGHLANDS LAKE 2	1008	200	10.0000	10.0000	23	05/18/1972	06/16/1930	12/31/1967

WATER DIVISION 1 DIST. 9 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
HINDRY 1ST ENLARGEMENT D	52	4	8.9400	8.9400	1	02/04/1884		12/31/1867
FISCHER DITCH	58	4	2.8800	2.8800	1	02/04/1884		09/16/1871
WARD DITCH	67	4	63.0000	53.0000	1	02/04/1884		12/06/1882
KNIGHT DITCH	116	4	8.0000	4.0000	2	09/24/1935	02/04/1884	06/25/1879
ALLEN NO 2 DITCH	132	37	4.4000	4.4000	2	09/24/1935	02/04/1884	12/31/1883
HAMLIN DITCH	190	37	5.0000	5.0000	2	09/24/1935	02/04/1884	05/01/1889
MERRITT DITCH	203	4	1.1000	1.1000	2	09/24/1935	02/04/1884	05/18/1893
ALLEN NO 1 DITCH	150	37	1.0000	1.0000	2	09/24/1935	02/04/1884	12/31/1901
ALLEN NO 3 DITCH	151	37	4.4000	4.4000	2	09/24/1935	02/04/1884	12/31/1901
ALLEN NO 4 DITCH	152	37	2.8500	2.8500	2	09/24/1935	02/04/1884	12/31/1901

WATER DIVISION 1 DIST.23 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
STEVENS DITCH 1	219	89	2.0000	2.0000	1	10/18/1889		07/01/1872
STEVENS DITCH 2	220	89	2.0000	2.0000	1	10/18/1889		09/01/1872
STEVENS DITCH 3	231	89	2.0000	2.0000	1	10/18/1889		06/01/1874
STEVENS DITCH 4	239	89	2.0000	2.0000	1	10/18/1889		07/01/1874
NELSON DITCH	315	117	27.0000	27.0000	1	10/18/1889		04/01/1879
WEED DITCH	324	148	13.5000	6.7500	1	10/18/1889		06/01/1879
LITTLE CHANNEL DITCH	389	148	8.1000	4.0500	1	10/18/1889		05/01/1882
WESTON DITCH	396	9	31.4500	21.4500	1	10/18/1889		05/16/1882
MILLER DITCH	409	103	15.7600	15.7600	1	10/18/1889		07/05/1882
ST CHARLES DITCH	415	102	6.0000	6.0000	1	10/18/1889		04/25/1883
O BRIAN VIA LOVE RAYNOR	417	148	6.5000	6.5000	1	10/18/1889		05/20/1883
REBECCA DITCH	422	102	5.0000	5.0000	1	10/18/1889		05/01/1884
TREVAN UPPER DITCH	453	133	30.0000	30.0000	1	10/18/1889		06/27/1887
JOHN RADFORD DITCH	454	170	12.0000	12.0000	1	10/18/1889		07/01/1887
WILLIAM A THOMAS	481	166	8.0000	8.0000	2	05/22/1913	10/18/1889	08/11/1873
SALT CREEK DITCH	503	134	5.0000	4.0000	2	05/22/1913	10/18/1889	10/07/1889
FUNK DITCH	502	108	1.0000	1.0000	2	05/22/1913	10/18/1889	10/07/1889
WIST MILL DITCH PL	669	103	11.5000	11.5000	1	05/22/1913		08/31/1892
ABE LEE PLACER D	674	103	10.0000	10.0000	1	05/22/1913		11/30/1898
MILLER FOUR MILE D	514	52	2.0000	2.0000	2	05/22/1913	10/18/1889	05/02/1901
LINK SLATER RES + FEEDER	570	159	58190.0000	58190.0000	13	05/22/1913		07/20/1909
COMO DITCH 1	575	166	100.0000	100.0000	13	05/22/1913		03/02/1910
DRY LAKE INLET D 2	574	9	50.0000	45.0000	13	05/22/1913		03/05/1910
DRY LAKE RESERVOIR	572	9	1858.0000	1673.0000	13	05/22/1913		03/05/1910
DRY LAKE INLET D 1	573	9	100.0000	100.0000	13	05/22/1913		03/05/1910
COMO RESERVOIR 1	571	159	8897.0000	8897.0000	13	05/22/1913		05/02/1910
COMO DITCH 3	577	159	50.0000	50.0000	13	05/22/1913		05/03/1910
COMO DITCH 2	576	159	300.0000	300.0000	13	05/22/1913		05/03/1910
COMO RESERVOIR 2	578	159	909.0000	909.0000	13	05/22/1913		05/03/1910
O Y E OUTLET DITCH	580	3	20.0000	20.0000	1	05/22/1913		07/13/1910
PERKINS GULCH DITCH	522	118	2.5000	2.5000	2	05/18/1918	05/22/1913	05/01/1874
HOWBERT GULCH DITCH	535	73	2.0000	2.0000	2	05/18/1918	05/22/1913	05/01/1880
BOYER DITCH 2	555	24	2.0000	2.0000	2	05/18/1918	05/22/1913	05/15/1910
BOYER DITCH 1	554	24	2.0000	2.0000	2	05/18/1918	05/22/1913	05/15/1910
THIBODOUX PIPELINE	675	103	1.0000	1.0000	2	12/04/1918	05/18/1918	08/17/1917
COMO RESERVOIR 1	100	159	8897.6100	8897.6100	2	03/24/1953	06/21/1922	01/01/1910
POYNER RESERVOIR	940	3	129.7900	129.7900	2	03/24/1953	06/21/1922	12/31/1910
ALMA RESERVOIR	130	103	20181.0000	20181.0000	2	03/24/1953	06/21/1922	09/05/1930
CUMMINS PLACER PIPELINE	187	67	11.3000	11.3000	2	03/24/1953	05/18/1918	12/31/1930
HITCHINS WATER CHANNEL	188	103	3.2600	3.2600	2	03/24/1953	05/18/1918	12/31/1930
MARCOTT DITCH	162	96	1.5000	1.5000	2	03/24/1953	06/21/1922	03/01/1950

WATER DIVISION 1 DIST. 43 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
LARAMIE RIVER DITCH	25	37	400.0000	100.0000	1	10/30/1896		08/07/1891
FRENCH WOMAN DITCH	31	12	7.5600	7.5600	13	10/30/1896		05/28/1896
BEN WARREN DITCH	39	3	4.2200	4.2200	2	10/11/1906	10/30/1896	07/15/1897
BEN WARREN D ENL	45	3	3.2800	3.2800	2	10/11/1906	10/30/1896	07/15/1900
SPRINGER DITCH	47	3	8.0000	8.0000	2	10/11/1906	10/30/1896	09/11/1900
CHAS E LANNING D	50	3	15.0000	15.0000	2	10/11/1906	10/30/1896	06/01/1901
~~*FORRESTER CK D~~	~~51~~	~~11~~	~~3.8600~~	~~3.8600~~	~~2~~	~~10/11/1906~~	~~10/30/1896~~	~~06/30/1901~~
FERGUSON DITCH	54	3	5.0000	5.0000	2	10/11/1906	10/30/1896	12/31/1901
LONG PARK D NO 2	58	3	10.0000	10.0000	2	10/11/1906	10/30/1896	06/01/1902
LANNING SPRINGER D	60	38	10.0000	10.0000	2	10/11/1906	10/30/1896	07/09/1902
LONG PARK DITCH	61	3	10.0000	10.0000	2	10/11/1906	10/30/1896	07/10/1902
PORTER LAKE	102	26	233.0000	233.0000	2	10/11/1906	10/30/1896	09/10/1902
DEADMAN NUNN CK D	76	9	275.0000	275.0000	23	02/20/1914	10/11/1906	08/25/1902
DETRO DITCH NO 2	81	3	8.0000	8.0000	2	02/20/1914	10/11/1906	01/16/1906
WEARS DITCH RES	133	14	68.0000	68.0000	2	02/20/1914	10/11/1906	08/15/1908
THOMPSON DITCH	84	6	5.0000	5.0000	2	02/20/1914	10/11/1906	05/26/1909

* See order of 6-4-1990

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WATER DIVISION 1 DIST. 49 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
JAMES E COOK DITCH	9	7	6.0000	6.0000	1	12/28/1893		02/05/1889
EMERSON DITCH NO 2	14	7	45.0000	45.0000	1	12/28/1893		04/15/1891
E G DAVIS RES DITCH	16	96	8.2500	8.2500	1	12/28/1893		04/28/1891
E G DAVIS RES DITCH	19	96	32.6300	32.6300	1	12/28/1893		01/16/1893
TUTTLE DITCH NO 3	20	8	1.0000	1.0000	2	09/08/1938	12/28/1893	12/30/1893
LOST MAN DITCH	26	4	2.0000	2.0000	2	09/08/1938	12/28/1893	10/02/1894
NEWBERRY DITCH	28	7	2.3000	2.3000	2	09/08/1938	12/28/1893	07/16/1895
J J PUGH DITCH	29	8	4.6000	4.6000	2	09/08/1938	12/28/1893	03/30/1896
CORLISS DITCH NO2A	30	7	4.0000	4.0000	2	09/08/1938	12/28/1893	05/06/1896
CORLISS DITCH 2C	31	7	2.0000	2.0000	2	09/08/1938	12/28/1893	05/07/1896
BARNES DITCH	44	7	11.3000	11.3000	2	09/08/1938	12/28/1893	04/15/1908
MCCALLUM RES	46	7	175.0300	175.0300	2	09/08/1938	12/28/1893	03/30/1909
KNAPP DITCH NO 1	48	7	5.7000	5.7000	2	09/08/1938	12/28/1893	07/08/1912
HAYLANDS DITCH	51	4	4.3000	4.3000	2	09/08/1938	12/28/1893	07/20/1921
NANNIE BODEN DITCH	55	7	5.0000	5.0000	2	09/08/1938	12/28/1893	03/01/1935
LOST MAN DITCH FIRST ENL	56	4	3.0000	3.0000	2	09/08/1938	12/28/1893	04/29/1935
FOSTER WELL NO 2	58	99	4.2000	4.2000	2	09/08/1938	12/28/1893	07/07/1935
SPRING CREEK DITCH	59	8	1.0000	1.0000	23	09/08/1938	12/28/1893	04/14/1936

WATER DIVISION 1 DIST. 64 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
DAVIS BROS D CO D	111	1	102.0000	72.0000	2	04/23/1910	11/10/1898	05/25/1903
RICE DITCH	11	1	35.0000	35.0000	2	07/05/1928	06/11/1913	04/28/1904
GEORGE PEDRONI DITCH	16	3	3.0000	3.0000	2	07/05/1928	06/11/1913	04/15/1908
DORSEY DITCH	22	4	2.0000	2.0000	2	07/05/1928	06/11/1913	12/28/1912
BUFFALO DRAW DITCH 1	26	2	5.0000	5.0000	2	07/05/1928	06/11/1913	07/23/1913
FARLEY DRAW DITCH RES	160	9	4.0000	4.0000	2	07/05/1928	06/11/1913	04/01/1914
FARLEY DRAW D 2	30	9	7.0000	7.0000	2	07/05/1928	06/11/1913	07/03/1914
MEYERHOLZ SEEPAGE D	50	97	1.0000	1.0000	2	07/05/1928	06/11/1913	06/11/1922
MITTLESTADT SEEPAGE D	53	24	3.0000	3.0000	2	07/05/1928	06/11/1913	05/01/1924
MORRISON SEEPAGE DITCH	54	21	1.0000	1.0000	2	07/05/1928	06/11/1913	05/19/1925
CITY DITCH	55	96	3.4500	3.4500	2	07/05/1928	06/11/1913	06/30/1925
HOHL DITCH	70	23	3.0000	3.0000	2	01/17/1938	07/05/1928	05/01/1909

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WATER DIVISION 1 DIST. 65 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
C B Q RR CO D PL	15	5	0.1980	0.1980	1	07/03/1912		05/30/1901
F D JOHNSON DITCH	17	5	4.0000	4.0000	1	07/03/1912		08/23/1905

WATER DIVISION 1 DIST. 80 DIVISION ENGINEER ABANDOMENT LIST

STRUCTURE NAME	SEQNO	STREAM NO	DECREED AMOUNT	ABANDONED AMOUNT	ADJ TYPE	ADJ DATE	P ADJ DATE	APPRO DATE
BROOKLYN HEIGHTS DITCH	732	110	2.5000	2.5000	1	05/22/1913		05/01/1876
WEBSTER DITCH	731	110	1.0000	1.0000	1	05/22/1913		05/01/1876
STANDERING DITCH	686	48	4.1200	3.1200	1	10/18/1889		05/01/1877
SPALDING DITCH	734	110	1.0000	1.0000	1	05/22/1913		05/01/1877
WEST DITCH	687	48	7.5000	4.6250	1	10/18/1889		04/01/1880
BERGER PIPELINE	857	30	0.0100	0.0100	1	05/22/1913		12/30/1880
EAST DITCH	688	48	7.5000	2.7500	2	10/18/1889		05/01/1881
BEAVER CREEK DITCH	680	11	16.0000	8.0000	1	10/18/1889		02/28/1883
HARRIS DITCH NO 8	745	51	1.0000	1.0000	1	05/22/1913		04/01/1883
ROGERS NORTH DITCH	746	146	0.5000	0.5000	1	05/22/1913		05/01/1883
KENOSHA DITCH	681	82	8.0000	5.0000	1	10/18/1889		07/08/1884
MORROW PIPELINE	859	49	1.0000	0.9880	1	05/22/1913		05/31/1887
ROGERS SOUTH DITCH	755	146	1.0000	1.0000	1	05/22/1913		05/01/1888
NORTH BEAVER CREEK D	760	109	8.0000	6.0000	1	05/22/1913		07/15/1889
RAILROAD PIPELINE	862	110	0.0500	0.0500	1	05/22/1913		12/31/1900
SPALDING D WEST SIDE	771	80	0.5000	0.5000	2	05/22/1913	10/18/1889	05/01/1901
HARRIS DITCH NO 9	774	48	1.0000	1.0000	1	05/22/1913		06/01/1901
SPALDING D EAST SIDE	776	80	0.5000	0.5000	1	05/22/1913		06/01/1903
GENEVA CREEK RESERVOIR	811	56	1480.0000	1480.0000	1	05/22/1913		01/26/1908
GENEVA CREEK DITCH	812	83	15.0000	15.0000	1	05/22/1913		01/26/1908
CASSEL POWER DITCH	864	110	13.0000	13.0000	1	05/22/1913		05/31/1910
UPPER CRAIG DITCH D	804	153	25.0000	25.0000	23	06/21/1922	05/18/1918	06/05/1920
UPPER CRAIG DITCH B	802	40	25.0000	25.0000	23	06/21/1922	05/18/1918	06/05/1920
UPPER CRAIG DITCH C	803	13	25.0000	25.0000	23	06/21/1922	05/18/1918	06/05/1920
UPPER CRAIG DITCH A	801	30	75.0000	75.0000	23	06/21/1922	05/18/1918	06/05/1920
C DITCH	836	37	1.0000	1.0000	2	03/24/1953	06/21/1922	06/01/1929
SILVER CLOUD PL	892	39	10.0000	10.0000	2	03/24/1953	06/21/1922	05/07/1938
HURLBUTT RES	970	48	36.0000	36.0000	2	11/15/1971	03/24/1953	03/16/1921
COOK'S CREEK	1988	94	3.0600	3.0600	2	12/31/1974	12/31/1973	06/07/1973

EXHIBIT C

The following water rights are to be deleted from the 1984 Abandonment List:

	Structure Name	Seq. No.	Decreed Amount	Adj. Date	Appro. Date
	<u>District One</u>				
	Wadlin Ditch 2	0076	135.00	11/21/1895	12/01/1888
	Wadlin Res.	0094	1010.10	11/21/1895	12/19/1891
	<u>District Two</u>				
	Whipple Ditch	0036	0.99	02/15/1888	12/31/1885
	Whipple Ditch	0188	5.00	08/02/1918	09/01/1884
	German 5 Res.	0214	23.31	08/02/1918	09/01/1889
	German 7 Res.	0216	6.88	08/02/1918	09/01/1898
	Ferguson Res.	0229	20.00	08/02/1918	10/20/1902
	Dougan Res.	0233	220.00	08/02/1918	04/18/1905
	Mildred Res.	0234	420.00	08/02/1918	12/15/1905
	East Line Res.	0244	75.00	08/02/1918	01/22/1907
	Clark Res.	0245	63.00	08/02/1918	01/24/1907
	Foster 2 Res.	0242	60.00	08/02/1918	04/14/1908
	Foster 1 Res.	0241	120.00	08/02/1918	04/14/1908
	<u>District Three</u>				
	Boyd Freeman D.	0879	66.05	04/11/1882	03/15/1862
*	Wm Calloway D. 1	1035	21.05	04/11/1882	05/01/1871
	Rist Canyon R.	1033	63.17	04/11/1882	09/01/1871
*	Chase Ditch	0547	21.41	04/11/1882	07/07/1880
	Clark Drain D.	0639	1.00	04/22/1922	07/18/1911
	<u>District Four</u>				
	Jones Ditch 2	0133	0.044	06/29/1916	04/30/1876
	Jones Ditch 1	0134	0.064	06/29/1916	04/30/1876
	Jones Ditch	0135	0.044	06/29/1916	04/30/1876
	Jones Ditch	0136	0.064	06/29/1916	04/30/1876
	Jones Ditch	0094	5.00	06/29/1916	04/30/1876
	Hupps Beaver D.	0146	0.0075	06/29/1916	05/05/1876
	Huppe Ditch	0147	0.0075	06/29/1916	05/05/1876
	Beaver Ditch	0148	0.0075	06/29/1916	05/05/1876
	Hupps Beaver D.	0149	0.15	06/29/1916	05/05/1876
	Huppe Ditch	0150	0.15	06/29/1916	05/05/1876
	Beaver Ditch	0151	0.15	06/29/1916	05/05/1876
	Hupps Beaver D.	0152	0.043	06/29/1916	05/05/1876
	Huppe Ditch	0153	0.043	06/29/1916	05/05/1876
	Beaver Ditch	0154	0.043	06/29/1916	05/05/1876
	Hupps Beaver D.	0155	0.2945	06/29/1916	05/05/1876
	Huppe Ditch	0156	0.2945	06/29/1916	05/05/1876
	Beaver Ditch	0157	0.2945	06/29/1916	05/05/1876
	Hupps Beaver D.	0159	0.15	06/29/1916	05/05/1876
	Hupps Beaver D.	0160	0.043	06/29/1916	05/05/1876

* Added by Order dated 12-19-88

EXHIBIT C

Structure Name	Seq. No.	Decreed Amount	Adj. Date	Appro. Date
District Four Cont'd				
Hupps Beaver D.	0161	0.2945	06/29/1916	05/05/1876
Huppe Ditch	0095	4.00	06/29/1916	05/05/1876
Beaver Ditch	0096	4.00	06/29/1916	05/05/1876
Horseshoe D. 1	0138	0.004	06/29/1916	05/01/1886
Horseshoe D.	0139	0.004	05/29/1916	05/01/1886
Horseshoe D. 2	0140	0.145	06/29/1916	05/01/1886
Horseshoe D.	0141	0.145	06/29/1916	05/01/1886
Horseshoe D. 3	0142	0.10	06/29/1916	05/01/1886
Horseshoe D.	0143	0.10	06/29/1916	05/01/1886
Horseshoe D. 4	0144	0.118	06/29/1916	05/01/1886
Horseshoe D.	0145	0.118	06/29/1916	05/01/1886
Horseshoe D.	0103	5.00	06/29/1916	05/01/1886
Doliph Ditch	0165	3.89	06/29/1916	04/01/1890
Huff Ditch	0166	2.89	06/29/1916	07/01/1892
Griffith Ditch	0168	4.00	06/29/1916	06/20/1898
Ground Ditch	0169	3.00	06/29/1916	05/10/1900
Brinwood No. 4	0245	1.08	11/14/1939	12/31/1878
Brinwood No. 1	0027	2.00	11/14/1939	12/31/1878
Brinwood No. 2	0243	2.00	11/14/1939	12/31/1878
Brinwood No. 3	0244	2.00	11/14/1939	12/31/1878
Brinwood No. 5	0246	5.00	11/14/1939	12/31/1878
Stead Ditch	0256	2.00	11/14/1939	06/01/1904
Beaver Creek D.	0257	0.62	11/14/1939	06/30/1904
Hollowell Pl 2	0259	0.70	11/14/1939	06/22/1912
Hollowell Pl 2	0289	0.01	11/14/1939	06/30/1913
Sprague Ditch	0318	20.00	11/14/1939	06/30/1927
District Five				
Meadow Ditch	0152	8.00	03/13/1907	04/10/1862
Sites Ditch	0155	3.80	03/13/1907	04/01/1868
Evans Ditch	0156	4.00	03/13/1907	04/10/1868
District Six				
Allen Hayden 1	0148	1.00	12/19/1900	04/02/1878
Allen Hayden 2	0149	1.00	12/19/1900	04/03/1878
Allen Hayden 3	0150	1.50	12/19/1900	04/04/1878
Allen Hayden 4	0151	0.50	12/19/1900	04/05/1878
Sect. 19 Res.	0359	88.00	12/19/1900	05/01/1888
Sect. 15 Res.	0281	17.00	04/10/1905	05/01/1898
Sect. 11 Res.	0283	82.00	04/10/1905	11/30/1899
Sect. 17 Res.	0282	33.00	04/10/1905	12/01/1899
Lafayette R 1, 2	0279	180.00	03/13/1907	02/15/1892
Caribou Mill Pl	0426	40.00	11/03/1909	07/01/1878
Kinnear D. 2	0127	781.00	06/21/1926	03/04/1902

EXHIBIT C

Structure Name	Seq. No.	Decreed Amount	Adj. Date	Appro. Date
District Six Cont'd				
Espy Ice Co D 2	0392	8.50	09/28/1953	09/20/1924
Espy Ice Co D 3	1393	8.00	09/28/1953	09/20/1924
Espy Ice Co D 1	0391	9.00	09/28/1953	09/20/1924
Mesa Res.	0225	633.00	03/04/1964	03/10/1961
District Seven				
Pauline Mill Ck	0382	8.50	10/09/1914	12/31/1862
Pauline M Ck En	0383	4.00	10/09/1914	09/21/1885
Broomfield Res.	0128	222.10	05/13/1936	12/31/1878
H. Koleski L. 2	0284	35.52	05/13/1936	12/31/1888
Marshall Res.	0340	35.52	05/13/1936	01/01/1890
Broomfield Res.	0129	4.06	05/13/1936	03/21/1906
District Eight				
First Attempt D	0088	32.00	12/10/1883	03/20/1868
Snell Ditch	0110	18.00	12/10/1883	09/30/1871
Sucess Ditch	0115	24.00	12/10/1883	04/60/1872
Cleona Ditch	0154	2.00	12/10/1883	06/30/1875
Cleona D. 1 Enl.	0171	1.50	12/10/1883	10/30/1878
James Ditch	0224	.50	03/03/1890	01/01/1883
Welsh Ditch	0245	14.25	03/03/1890	04/28/1886
Green Meadow D.	0246	2.79	03/03/1890	05/15/1886
King Ditch	0258	1.20	03/03/1890	02/23/1888
J Thomas Ditch	0294	2.00	11/06/1909	10/05/1886
J D Brown D.	0321	1.50	06/09/1924	11/06/1885
S R Brown Res.	0365	26.00	06/09/1924	12/01/1906
S R Brown D. 1	0363	2.50	06/09/1924	12/03/1906
S R Brown D. 2	0364	3.00	06/09/1924	12/05/1906
L. Dry Ck Enl	0390	2.21	06/16/1930	11/13/1885
Levy Booth Well	0402	2.00	06/16/1930	06/10/1912
Booth Ditch	0408	3.50	06/16/1930	11/07/1927
Working D. 2	0409	2.90	06/16/1930	07/03/1928
Working Ditch	0410	3.50	06/16/1930	11/07/1928
Mikelson P & SPG	0505	3.25	05/18/1972	02/07/1893
Heim Well 1	0508	1.22	05/18/1972	09/17/1950
Heim Well 2	0461	2.34	05/18/1972	06/25/1956
Co Game Fish 4	3576	0.61	12/31/1972	12/31/1951
Co Game Fish 6	3578	0.888	12/31/1972	12/31/1951
Co Game Fish 7	3579	0.666	12/31/1972	12/31/1951
Pollock W RF779	2464	1.78	12/31/1972	03/03/1958
Co Game Fish 5	3577	1.66	12/31/1972	04/01/1963
Kiewit Well 3	3457	2.00	12/31/1972	08/26/1963
Kiewit Well 4	3456	4.00	12/31/1972	07/10/1964

EXHIBIT C

Structure Name	Seq. No.	Decreed Amount	Adj. Date	Appro. Date
District Nine				
Ind. Highline D	0063	4.01	02/04/1884	09/25/1881
Ind. Highline D	0064	4.01	02/04/1884	09/25/1881
District Twenty-Three				
Alden Milligan D	0226	15.00	10/18/1889	08/31/1873
Jackson Ditch	0483	5.00	05/22/1913	05/01/1874
Edmiston Ditch	0482	10.00	05/22/1913	05/01/1874
L. Penn D.	0611	10.00	05/22/1913	12/31/1874
Alma Town Claim	0667	1.00	05/22/1913	12/31/1888
O Y E Res.	0579	169.00	05/22/1913	07/13/1910
Haver Ditch 4	0551	9.75	05/18/1918	06/15/1903
Haver Ditch 5	0552	9.75	05/18/1918	06/15/1903
Ruby Res.	0147	35.634	03/24/1953	12/31/1943
District Forty-~~Nine~~ Eight				
Foster Well 1	0057	4.60	09/08/1938	05/30/1935
X Forrester Creek D 0057		2.80	11/11/1906	06/30/1901
District Sixty-Four				
Long Is. D 1 En	0182	20.00	06/11/1913	09/20/1906
Shortline D.	0045	6.00	07/05/1928	02/16/1920
Shortline Res.	0066	9.02	07/05/1928	02/16/1920
District Sixty-Five				
Pierce Miller D	0016	2.50	07/03/1912	04/22/1904
District Eighty				
Elder Ditch	0718	0.50	05/22/1913	05/01/1873
Lininger D.	0846	11.40	03/24/1953	02/28/1927
Porter Upper R.	0839	0.56	03/24/1953	10/31/1930
Porter Upper D.	0838	1.00	03/24/1953	10/31/1930
Shawnee Wtr S.D.	0893	1.00	03/24/1953	07/05/1947
Shawnee Res.	0908	6.42	03/24/1953	07/05/1947

X See order of 6-4-1990

DISTRICT COURT, WATER DIVISION NO. 1, STATE OF COLORADO

Case Nos. 84 CW 359, 84 CW 293 and 84 CW 204

JUDGMENT AND DECREE OF COURT AS IT RELATES TO THE REVOLUTION DITCH DECREE

CONCERNING THE TABULATION OF WATER RIGHTS DETERMINED TO HAVE BEEN ABANDONED, IN WHOLE OR IN PART

THIS MATTER having been considered by the Water Judge, he hereby finds:

FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. The abandonment list of certain water rights was timely filed with this Court on July 1st, 1984, in Case No. 84 CW 204. A protest to this list was timely filed by The Leggett Ditch and Reservoir Company, the owner of the Revolution Ditch decree, on October 19th, 1984, in Case No. 84 CW 293. A motion to correct a clerical error in the abandonment list was timely filed by the Division Engineer for Water Division No. 1 on November 29th, 1984, in Case No. 84 CW 359.

2. The above cases all relate, at least in part, to the correction of the Revolution Ditch decree and are hereby consolidated for purposes of such correction.

3. All notices required by law for filing and protesting the abandonment list have been fulfilled. The Court has jurisdiction over the subject matter of this proceeding and the parties affected hereby, whether they have appeared or not.

4. No other protests have been filed which affect the Revolution Ditch decree and the time for filing additional protests has expired. The Division Engineer and The Leggett Ditch and Reservoir Company have approved this judgment and decree, as indicated by their signatures hereon, and have withdrawn their protests and motion with the understanding that such withdrawal is conditioned upon a judgment and a decree, pursuant hereto, being signed without changes.

5. Error in Abandonment List. The abandonment list contained clerical errors which are described in the motion filed by the Division Engineer in Case No. 84 CW 359.

6. Correction of Abandonment List. The abandonment list should have read, and is hereby corrected to read, as follows:

Structure Name	Seq. No.	Source Name	Decreed Amount	Abandoned Amount	Remaining Amount
Revolution Ditch	600115	Boulder Creek	99.97	49.97	50.00 c.f.s.

Adj. Type	Adj. Date	P.Adj. Date	Appro. Date
1	06/02/1882		12/07/1881

THE COURT, THEREFORE, HEREBY DECREES:

A. The findings of fact and conclusions of law set forth above are incorporated in this judgment and decree.

B. The Division Engineer, the State Engineer, their subordinates, and other water administration officials shall administer the Revolution Ditch decree in accordance with this judgment and decree. These officials shall further incorporate in their administrative records, including abandonment and tabulation lists, the corrected Revolution Ditch decree as set forth in paragraph 6 above.

C. The Court shall retain jurisdiction pursuant to C.R.S. 1973 §37-92-402 as amended, for enforcement of this judgment and decree to insure the correction of the abandonment list as provided herein.

Dated this 25th day of February, 1985.

Water Judge.

APPROVED:

FLANDERS, WOOD, SONNESYN & SCHUETZE

BY: David N. Sonnesyn
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Division of Water Resources
Water Division No. 1
Room 209, 800 8th Avenue
Greeley, Colorado 80631
352-8712

STATE OF COLORADO)
) ss
County of Park)

IN THE DISTRICT COURT

IN THE MATTER OF THE ADJUDICATION OF THE PRIORITY OF RIGHTS TO THE USE OF WATER FOR IRRIGATION AND OTHER BENEFICIAL USES, IN WATER DISTRICT NUMBER TWENTY-THREE, IN WATER DIVISION NUMBER ONE, IN THE STATE OF COLORADO.

D E C R E E

EXHIBIT "B"

STATE OF COLORADO)
) ss
County of Park)

IN THE DISTRICT COURT

IN THE MATTER OF THE ADJUDICATION OF THE PRIORITY OF RIGHTS TO THE USE OF WATER FOR IRRIGATION AND OTHER BENEFICIAL USES, IN WATER DISTRICT NUMBER TWENTY-THREE, IN WATER DIVISION NUMBER ONE, IN THE STATE OF COLORADO

Said entitled matter coming regularly on for final hearing and adjudication, and the Court having taken and heard and considered all the testimony and proofs offered and submitted by each and all claimants in said proceeding, and being now fully advised in the premises:

The Court finds that due and sufficient notice of the object and purpose of said proceeding, and of the time and place when and where the taking of testimony would begin in said proceeding, was duly given and served upon each and every person and corporation in anywise interested therein, within the time, and in the manner, required by law and the orders of this Court, and that all persons in anywise interested in said proceeding, or in any rights therein or thereby considered, adjudicated or determined, have been duly and lawfully served with due process of law therein, and duly brought into said proceeding.

The Court further finds that the Altura Reservoir is in the North Fork of South Platte River Drainage, hereinafter termed "North Fork Drainage", but that all the ditches herein mentioned are in the South Fork of South Platte

DITCH NO. 380 - The HAVER NUMBER FOUR DITCH
DITCH NO. 381 - The HAVER NUMBER FIVE DITCH

(Drainage of the South Fork of South Platte River)

The Court finds that the Haver Number Four Ditch and the Haver Number Five Ditch are each and both claimed by Joseph Rogers; that each and both divert water from the east branch of the South Fork of the South Platte River, and that they are jointly used for the irrigation of the same tract of land, which said tract consists of one hundred ninety-two (192) acres; and that nine and three-quarters (9-3/4) cubic feet of water per second of time have been appropriated by claimant through the joint use of the two ditches and beneficially applied to the irrigation of said one hundred and ninety-two (192) acres, of land;

That the headgate of the said Haver Number Four Ditch is located on the southwest bank of said stream, at a point from whence the east quarter corner of Section Twelve (12), Township Twelve (12) South, Range Seventy-seven (77) West of the Sixth Principal Meridian, in the County of Park, State of Colorado, bears North Eighty-one (81) degrees east six hundred seventy (670) feet, and that the headgate of said Haver Number Five Ditch is located on the southwest bank of said stream, at a point whence the said east quarter corner of Section Twelve (12), Township Twelve (12) South, Range Seventy-seven (77) West of the Sixth Principal Meridian, said County and State, bears north forty-three (43) degrees and twelve (12) minutes east, four hundred ninety-three (493) feet; that each and both said ditches were constructed as

early as the 15th day of June, 1903, and that they are each entitled to Priority Number Four Hundred Two (402) in Water District Number Twenty-three, which is Priority Number Seventy-six (76) in the drainage of the South Fork of the South Platte River:

It is accordingly considered, ordered and adjudged, by the Court: That each and both said ditches are entitled to Priority Number Four Hundred Two (402) in said Water District Number Twenty-three, as of date June 15, 1903, which is South Fork Drainage Priority Number Seventy-six (76); and that the person or persons entitled thereto are hereby granted the right to divert from said stream, through said ditches jointly, under said Priority Number Four Hundred Two (402), nine and three-quarters (9-3/4) cubic feet of water per second of time, or so much thereof as shall be necessary for the proper irrigation of said one hundred ninety-two (192) acres of land, -

Subject, however, and subordinate, to any and all priorities for water, and water rights, heretofore, in and by any judgment of this Court, judicially adjudicated, determined and fixed.

- - -

And it is ordered that the objections and exceptions of each claimant herein are entered and saved, and each claimant given sixty days from and after this date within which to file a motion for a new trial.

Done and signed in Open Court, this 18th day of May, A. D. 1918:

BY THE COURT:

(Signed) JAMES L. COOPER
Judge.

STATE OF COLORADO)
) ss
County of Park)

I, A. F. WILLMARTH, Clerk of the District Court in and for the County of Park, State of Colorado, do hereby certify that the above and foregoing is a true and correct copy of that certain decree entered by said Court on May 18th, 1918, in the matter of the adjudication of priority of water rights in Water District Number Twenty-three of the State of Colorado, which matter was instituted in said Court by the filing of the petition of the Burlington Ditch, Reservoir and Land Company, for adjudication as to the Altura Reservoir in said Water District.

Witness my hand, and the seal of said Court, this 1st day of October A. D. 1918:

A. F. Willmarth

Clerk of the District Court.

STATE OF COLORADO)
) - SS.
COUNTY OF BOULDER)

IN THE DISTRICT COURT
No. 10077.

IN THE MATTER OF THE ADJUDICATION OF PRIORITY OF RIGHTS TO USE OF WATER FOR IRRIGATION AND OTHER BENEFICIAL PURPOSES, IN WATER DISTRICT NO. 4, WATER DIVISION NO. 1, IN THE STATE OF COLORADO.

D E C R E E

Now, on this 14th day of January A. D. 1939, being one of the juridical days of the October Term, A. D. 1938, of this Court, this matter came on for final hearing and determination and decree, petitioner and the several claimants herein appearing by their respective attorneys;

Thereupon, the Court having heard all the evidence offered in this proceeding in open court, having examined the several claims and objections filed, and heard the arguments of counsel, and having considered the same, and now being sufficiently advised in the premises, does render the following findings and decree herein;

FINDINGS OF PRELIMINARY AND JURISDICTIONAL MATTERS

The Court finds;

1. That The Loveland Lake and Ditch Company, as claimant and owner of The Loveland Reservoir, on October 17, A. D. 1938, filed its petition and claim for adjudication of its rights as an irrigation reservoir appropriator in said Water District No. 4, praying the adjudication of priorities to the right to the use of water "for irrigation purposes" in said Water District No. 4. That thereupon proceedings were

duly had whereby notice of this proceeding for adjudication of priorities "for irrigation purposes" was duly given by prepaid registered mail as provided by statute in such cases, and also by publication and posting as required by Order of Court made and entered in this cause.

2. That thereafter such proceedings were had in this cause that, on March 15, 1939, upon petition of The Northern Colorado Water Conservancy District, the title and scope of this proceeding, originally instituted by the said The Loveland Lake and Ditch Company for the adjudication of priority of rights to the use of water "for irrigation purposes" only, was duly ordered enlarged to include the use of water "for irrigation and other beneficial purposes." And thereupon, on last said date, the Court further ordered that printed notice of these proceedings, as amended aforesaid, be served upon each claimant, or the last named grantee of any claimant, by prepaid registered mail, as provided by statute, at the post office address set forth in the list, theretofore duly prepared and certified by the state engineer pursuant to prior order of this Court, of all filings or claims for appropriation of water for irrigation or other beneficial purposes within Water District No. 4, Irrigation Division No. 1, of the State of Colorado, which had not theretofore been noted as cancelled or submitted for adjudication; and that copy of said notice, including copy of said order, has been duly served by registered mail on all persons, associations and corporations entitled thereto; and that copies of said order and notice have been duly published and posted as required by law and by Order of Court entered in this cause.

3. That on said 15th day of March, A. D. 1939, the

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Court, by order duly made and entered, continued the time for filing statements of claim in said proceeding to and until April 22, 1939, and fixed the time for the taking of evidence in support of any statements of claim filed as the 2d day of May, A. D. 1939, at the hour of 9.30 o'clock A. M. in open court, in the District Court room in the Court House, in the City of Boulder, County of Boulder and State of Colorado; that thereafter, on April 20, 1939, the Court, by order, duly extended the time for filing statements of claim to and including June 24, 1939 (commencement of taking testimony, however, remaining fixed as May 2, 1939); and thereafter on July 6, 1939, the Court, by order, duly extended the time further for filing statements of claim to and including September 1, 1939 (the taking of testimony, however, continuing as theretofore ordered).

4. That on said 2d day of May, A. D. 1939, pursuant to said orders, the Court did proceed to hear and examine testimony and evidence introduced in support of the respective claims of all claimants who had filed claims herein; and the hearing and taking of testimony and evidence in support of such claims was thereafter duly continued to July 6, 1939, and July 7, 1939, and July 11, 1939, and July 27, 1939, and September 6, 1939, and September 7, 1939, and September 12, 1939. and the Court ordered that said testimony and evidence be transcripted and filed with the Clerk of this Court, which was accordingly done.

GENERAL CONDITIONS AND PROVISIONS WHICH CONTROL EACH AND EVERY SPECIAL DECRETAL ORDER HEREIN.

The Court finds:

First. No part of this decree shall in any way be taken, deemed or held to confirm, impair, or in any manner

affect any claim of right or property held or claimed by any person, association, or corporation, in or to any ditch, pipe line, canal, or reservoir, or any part thereof, or the land or any part thereof on which the same may be situate, or the land held or claimed as right-of-way of or for any of them; nor shall it in any manner affect any question or claim of right between the co-owners or -claimants of any individual ditch, pipe line, canal, or reservoir as between each other; neither shall it affect any claim or priority made between parties using water from the same ditch, pipe line, canal, or reservoir as to such water.

Second. No part of this decree shall be taken or held to allow any excessive use or waste of water whatever; nor allow any diversion of water except for lawful and beneficial uses, or any use other than the use for which such appropriation has been made.

Third: This decree shall be taken, deemed and held as determining the several priorities of right by appropriation to the use of water from the natural streams and springs of said Water District No. 4 for agricultural, domestic, mechanical, and other beneficial purposes, incident to the several ditches, pipe lines, canals, and reservoirs in said water district, each according to the construction, enlargement or extension thereof, with the amount of water held to have been so appropriated.

Fourth. Nothing in this decree shall be deemed, taken, or held to impair in any manner any right to the use of water for agricultural, domestic, mechanical or other beneficial purposes established by any former decree or decrees of this Court rendered and entered and now in force in the

matter of the adjudication of the priorities of right to the use of water in Water District No. 4; or be deemed, taken, or held to establish any right to the use of water adverse or antagonistic to any right for the same purpose established by any such former decree or decrees of this Court, but all rights established by this decree shall at all times be deemed, taken, and held to be subject and subordinate and junior to those established by any such former decree or decrees, any date of appropriation found in this decree to the contrary notwithstanding.

Fourth. Whenever the dimensions of any ditch, pipe line, canal, or reservoir, or the height to which any reservoir may be filled, is stated in this decree, such dimensions shall be deemed and taken to control the statement of the estimated carrying or storage capacity thereof.

Fifth. The several irrigation reservoirs adjudicated by this decree are given consecutive irrigation reservoir numbers beginning with No. 25, which next follows No. 24--Enlarged Handy Reservoir--adjudicated in former decree of this Court rendered on the 1st day of April, A. D. 1931. The several irrigation reservoir priorities adjudicated by this decree are consecutively numbered beginning with reservoir priority No. 30, the next consecutive number following number 29, heretofore in said former decree adjudicated as affected by means of Enlargement of Hertha Reservoir, being irrigation reservoir No. 22.

The several irrigation ditches, pipe lines, and canals adjudicated by this decree are given consecutive irrigation ditch numbers beginning with ditch No. 48, next following ditch No. 48--The Huppe Ditch--adjudicated in said former decree of this Court rendered on the 1st day of April, A. D. 1931. The

first immediate ditch irrigation priority here adjudicated is numbered 83, being the next consecutive number following No. 82, heretofore in said former decree adjudicated as effected by means of said The Huppe Ditch.

The several ditches, pipe lines, and canals adjudicated by this decree for domestic and related purposes are given consecutive numbers beginning with No. 6, next following No. 5--Greeley-Boulder Pipe Line--adjudicated in said former decree of this Court rendered on the 1st day of April, A. D. 1931. The first immediate domestic priority here adjudicated is numbered 5, being the next consecutive number following No. 4 heretofore in said former decree adjudged as effected by means of said Greeley-Boulder Pipe Line.

The several ditches, pipe lines, and canals for power purposes adjudicated by this decree are given consecutive numbers beginning with No. 1. The first power priority here adjudicated is numbered 1.

The several reservoirs, ditches, pipe lines and canals for the use of water for any other beneficial purpose, other than domestic, agricultural or manufacturing or power, adjudicated by this decree are given consecutive numbers beginning with No. 1, with the name of the use. And the first priority for such other beneficial purpose here adjudicated is numbered 1, with the name of the use.

Sixth. The priority numbers, and not the dates when each priority is found to have been effected, shall determine the precedence of right to receive water, because each priority adjudicated herein is of inferior right and junior to the priorities for the same uses heretofore adjudged in decrees of this Court pertaining to said Water District No. 4.

Subject to the general conditions and provisions hereinabove set forth, IT IS FOUND, ORDERED, ADJUDGED AND DECREED BY THE COURT, with respect to each of the several ditches, pipe lines, canals, and reservoirs herein adjudicated, as follows:

OSBORN IRRIGATION SYSTEM

(Irrigation Ditch Priority No. 98; Ditch No. 54)

1. The name of this ditch system is Osborn Irrigation System, and Osborn Farms, Incorporated, a Colorado corporation, whose address is Loveland, Colorado, and M. Kenneth Osborn, whose address is R. F. D. 1, Loveland, Colorado, are the claimants of said system.

2. The said Osborn Irrigation System is located in the north half (N½) of Section nineteen (19), Township five (5) north, Range sixty-eight (68) west of the Sixth Principal Meridian, in Larimer County, Colorado, and that said irrigation system consists of an equalizer pond and a ditch consisting of four connecting sections, identified as Ditches Nos. 1, 2, 3 and 4.

3. Said irrigation system derives its supply of water from five sources of seepage in the Big Thompson water shed, as hereinafter described.

That the aforesaid equalizer pond, which is at the head of ditch No. 1, has an area of two and seventy-five hundredths (2.75) acres, capacity of ten (10) acre feet, and that there is no inlet ditch to said qualizer pond, the same being filled from source No. 1, which is seepage and waste water accumulated therein from adjoining lands, consisting of an average flow of forty-five hundredths (.45) cubic feet per second of time. The headgate for the outlet of the qualizer pond being also the head of ditch No. 1, is located at a point whence the northeast corner of said Section nineteen (19) bears north 27°41' east 1049 feet.

Source No. 2 is a seepage flow which is concentrated at a point from whence the northeast corner of Section nineteen

(19) bears north 32°10' east 1530 feet, and consisting of an average flow of twenty-five hundredths (.25) cubic feet of water per second of time.

Source No. 3 is a seepage flow which is concentrated at a point from whence the north quarter corner of Section nineteen (19) bears north 29°10' west 1965 feet, and consisting of an average flow of fourteen-hundredths (.14) cubic feet of water per second of time.

Source No. 4 is a seepage flow which is concentrated at a point from whence the north quarter corner of Section nineteen (19) bears north 2°10' east 1942 feet, and consisting of an average flow of twelve-hundredths (.12) cubic feet per second of time.

Source No. 5 is a seepage flow which is concentrated at a point from whence the north quarter corner of section nineteen (19) bears north 9°30' east 2110 feet, and consisting of an average flow of ten-hundredths (.10) cubic feet of water per second of time.

4. Ditch No. 1 flows southwesterly from source No. 1 past source No. 2, a distance of one thousand five hundred (1,500) feet, to the point where it connects with Ditch No. 2; said Ditch No. 1 has a depth at high water line of seventy-five hundredths (.75) feet; the width of said ditch at high water line is four (4) feet; the width of said ditch at the bottom is two (2) feet; the grade of said ditch is one and five-tenths (1.5) feet per thousand feet; and that the carrying capacity of said ditch is two and twenty-five hundredths (2.25) cubic feet per second of time.

5. Ditch No. 2 extends to the eastward from the eastward end of ditch No. 3 to the end of ditch No. 1, a dis-

tance of one hundred seventy (170) feet; said ditch has a depth of five-tenths (.5) feet; the width of said ditch at high water line is two (2) feet; the width at the bottom thereof is one (1) foot; the grade of said ditch is one and five-tenths (1.5) feet per thousand feet; and the carrying capacity is forty-two hundredths (.42) cubic feet per second of time.

6. Ditch No. 3 extends both easterly to ditch No. 2, and westerly to ditch No. 4, from source No. 3, and is a six (6) inch vitrified tile; that the grade of said tile is one and five tenths (1.5) feet per thousand feet; the length of said tile is four hundred (400) feet; and the carrying capacity of said tile is twenty-two-hundredths (.22) cubic feet per second of time.

7. Ditch No. 4 is a continuation of ditch No. 3, and the water in said ditch may be run in either a southwesterly or northeasterly direction from sources Nos. 4 and 5, and in a southwesterly direction only from source No. 3; that the depth of said ditch at high water line is five-tenths (.5) feet; the width of said ditch at high water line is two (2) feet; the width of said ditch at the bottom is one (1) foot; the grade of said ditch is one and five-tenths (1.5) feet per thousand feet; the length of said ditch is one thousand two hundred (1,200) feet; and the carrying capacity of said ditch is forty-two hundredths (.42) cubic feet per second of time.

8. The flow from all of said sources is and has been carried in and through the aforesaid ditches to and for the irrigation of lands of the petitioners and is necessary to their use, and that all of the sources, ditches and uses of said Osborn Irrigation System are upon the lands and property of the claimants.

9. That work of construction was commenced on said system prior to December 31, 1888, and was completed with diligence, and the water to the extent of the supply from all of said sources, estimated at a total of 1.06 cubic feet per second, used as aforesaid.

10. As a matter of law claimants are entitled to a decree to the effect that there be permitted to flow into said ditch system from said seepage sources water in amount estimated at 1.06 cubic feet per second for irrigation purposes, with Irrigation Ditch Priority No. 88, as of date December 31, 1888.

WHEREFORE, IT IS ORDERED, ADJUDGED AND DECREED by the Court, that the water from said five seepage sources be allowed to flow into said Osborn Irrigation System to the capacity thereof as described in paragraphs 4, 5, 6 and 7 hereof, estimated at a total amount of one and six-hundredths (1.06) cubic feet of water per second of time, as of priority of the 31st day of December, 1888, with IRRIGATION DITCH PRIORITY NO. 88, subject to the general and paramount provisions of this decree.

Recorded JUN 26 1979 at 1:52 o'clock P.M. Reception No. 313807 James P. Thompson

CPC Form 25. Rev. '76—ESTATE CLOSING ORDER—Bradford Publishing Co., 1824 Stout Street, Denver, Colorado (573-5011) —8-77

Court Filing Stamp

IN THE DISTRICT COURT

IN AND FOR THE

COUNTY OF LARIMER

STATE OF COLORADO

Probate No. 10523

IN THE MATTER OF THE ESTATE OF

M. KENNETH OSBORN, a/k/a KENNETH OSBORN,

Deceased

ESTATE CLOSING ORDER

Upon consideration of the petition for Final Settlement and Distribution filed by Louise Osborn Gardels on June 19, 1979 (date of filing), (and) for discharge of the personal representative (,) (and for adjudication of) [redacted] ☐ Testacy ☐ Intestacy

The Court finds and determines that the allegations and statements in the Petition are true and correct, that all required notices have been given, that this estate has been administered according to the laws of this State and the orders of this Court and should be closed.

(And the Court further finds:)

☒ that the decedent's last will dated Aug. 12, 1971 was previously informally probated by the Registrar of this Court, that at the time of the execution of such will the decedent was a person eighteen years of age or older and was of sound mind, that such will was executed by the decedent with all of the formalities and under all the circumstances necessary to make it valid and that such will was never revoked by the decedent.

☐ that the decedent died intestate (because decedent left no will).

Now, therefore, it is ORDERED that the final account of the personal representative be and hereby is approved, that the personal representative be and hereby is authorized and directed to deliver and distribute title and possession of the assets of the state to the distributees and in the amount and the manner set forth in the annexed Schedule of Distribution, that upon making such delivery and distribution, and duly filing receipts with this Court, the personal representative shall be fully and finally released and discharged from his trust, and together with his surety, shall be released and discharged from his bond and any and all liability arising in connection with his performance of his duties as personal representative, and the administration of this estate shall be closed.

(And it is further ORDERED, ADJUDGED and DECREED by the Court:)

☐ that the names and addresses of the heirs of the decedent, and the ages of any who are minors, are set forth in the annexed Schedule of Heirship.

☐ that the last will of _____ dated _____, 19____, previously informally probated, is hereby formally probated.

☐ that the decedent died intestate (because decedent left no will).

JUN 19 1979

Judge

5948 300808 1500

CPC Form 25D. Rev. '74.—SCHEDULE OF DISTRIBUTION ANNEXED TO ESTATE CLOSING ORDER
—Bradford Publishing Co., 1824-46 Stout Street, Denver, Colorado (573-5911) —5-76

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IN THE DISTRICT COURT

IN AND FOR THE

COUNTY OF LARIMER

STATE OF COLORADO

Probate No. 10523

IN THE MATTER OF THE ESTATE OF

M. KENNETH OSBORN, a/k/a KENNETH OSBORN,

Deceased.

SCHEDULE OF DISTRIBUTION ANNEXED TO ESTATE CLOSING ORDER DATED

June 19, 1979

Name of Distributees	Amount of Money	Description of Personality and Real Estate in Kind.
Louise Osborn Gardels	$5236.17	See attached Schedules

APPROVED and ORDERED:

Judge

Estate of M. Kenneth Osborn,
a/k/a Kenneth Osborn, Deceased
Probate No. 10523

DESCRIPTION OF PERSONALTY AND REAL ESTATE IN KIND

Miscellaneous farm equipment and tools not previously sold by Order of the Court as follows:

Misc. in old milk barn, Spray rig, Dump wagon, Walking plow, Spring tooth, Roller, Mower, Misc. power hack saw, Forge, Anvil, Misc. tools, Plow, Mower-horse drawn, and level.

54 shares of common stock of Poudre Valley Royalties, Inc.
10 shares of common stock of Big Thompson Milling & Elevator Co.
104 shares of common stock of American Telephone & Telegraph Co.

Real Estate as fcllows:

Parcel I:
The North Half (N1/2) of Northeast Quarter (NE1/4) of Section Nineteen (19), Township Five (5), Range Sixty-eight (68), less ten acres off east end of said tract sold to Rathburn and except tract conveyed to Louise O. Gardels in Book 1391, Page 31, Larimer County, Colorado records.

Parcel II:
The East Half (E1/2) of the East Half (E1/2) of Northwest Quarter (NW1/4) of Section 19, Township Five (5), Range Sixty-eight (68), less five acres sold to Maerki, described as follows: Commencing at a point 1994.7 feet East of the Northwest Corner of Section Nineteen (19), Township Five (5), Range Sixty-eight (68); thence South 660 feet, thence East 330 feet, thence North 660 feet; thence West 330 feet to place of beginning.

Parcel III:
The West Two-Thirds (W 2/3) of Southwest Quarter (SW1/4) of Northeast Quarter (NE1/4) of Section Nineteen (19), Township Five (5) North, Range Sixty-eight (68) West of the Sixth P.M.; together with eighty-five inches of water in the original Chubbuck Ditch, now the Loveland and Greeley Irrigation Canal, and all rights to seepage or waste waters arising on lands above mentioned.

Parcel IV:
All that part of the Southeast Quarter of the Northeast Quarter (SE1/4 NE1/4) and the East One-Third of the Southwest Quarter of the Northeast Quarter (E1/3 SW1/4 NE1/4) of Section Numbered Nineteen (19), Township Numbered Five (5) North, Range Numbered Sixty-Eight (68) West of the Sixth Principal Meridian, lying North of the North bank of the Old Hahn Lateral running Southwesterly and Northeasterly across said Southeast Quarter of the Northeast Quarter (SE1/4 NE1/4) and East one-third of Southwest Quarter of Northeast Quarter (E1/3 SW1/4 NE1/4), more particularly described as follows: Beginning at a point on the East line of Section 19, Township 5 North, Range 68 West of the 6th P.M. 490 feet South of the Northeast corner of the South Half of the Northeast Quarter of said Section 19; thence North 490 feet to the Northeast corner above mentioned; thence West along the North line of the said South One-Half 1,760 feet, more or less, to the West line of the East One-Third of the Southwest Quarter of the Northeast Quarter of said Section 19; thence South along said West line 788 feet, more or less, to the North Bank of the Old Hahn Lateral; thence following said North Bank of the Old Hahn Lateral North 85° East 1,547 feet, more or less, to a point South 68° West 227 feet from the point of beginning; thence North 68° East 227 feet to the point of beginning, except tract conveyed to Louise O. Gardels in Book 1391, Page 31; together with Osborn Irrigation System, Ditch No. 54 and Priority No. 88. Together with one share of the capital stock of The Ryan Gulch Reservoir Company, Certificate No. 64. Except Parcel 1

conveyed to the City of Loveland by the Rule and Order dated August 28, 1978, described as follows: A tract of land located in the Northeast Quarter of Section 19, Township 5 North, Range 68 West of the 6th Principal Meridian, Larimer County, Colorado, and more particularly described as follows: Considering the North line of the Northeast 1/4 of Section 19 to bear South 89°40'38" East and all bearings contained herein relative thereto; Comencing at the Northwest corner of the Northeast 1/4 of the Northeast 1/4 of Section 19, from which the Northeast corner of said Section 19 bears South 89°40'38" East 1,319.02 feet; thence North 89°40'38" West 60.00 feet; thence South 00°26'29" West 1,266.87 feet to the True Point of Beginning; thence continuing South 00°26'29" West 300.00 feet to the North line of the United States Bureau of Reclamation Power Line Easement; thence South 70°34'22" West 478.47 feet along said North easement line; thence North 00°26'29" East 461.37 feet; thence South 89°40'38" East 450.00 feet to the True Point of Beginning; said parcel containing 3.934 acres more or less.

Together with all water or water rights appurtenant to all of the above described four (4) parcels of property.

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REV	DESCRIPTION	DATE	APPROVED

Weiland, Inc.
Environmental & Engineering
PO BOX 18087
BOULDER, CO. 80308
ph 303-443-9521

COULSON GRAVEL PONDS AUGMENTATION PLAN

LARIMER & WELD COUNTIES

PREPARED FOR: COULSON EXCAVATING CO. ,INC.

FIGURE 1
SITE LOCATIONS

SCALE	DWG NO.		REV.
1"=2,500'	FIGURE 1.DWG		REV
DRAWN BY: CTW	CHECKED BY: PFW	DATE: 01/29/2019	SHEET 1 OF 1

LEGEND

CLASS A PAN EVAPORATION ISOLINE MINOR 0.25”

CLASS A PAN EVAPORATION ISOLINE MAJOR 1.25”

CLASS A PAN EVAPORATION ISOLINE SOURCE: COLORADO DNR CDSS GIS

0 2500 5000 Feet

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COULSON GRAVEL PONDS AUGMENTATION PLAN

LARIMER & WELD COUNTIES

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FIGURE 2 - NOAA TR-33 CLASS A PAN EVAPORATION

SCALE	DWG NO.	REV.
1"=2,500'	FIGURE 2.DWG	REV

DRAWN BY:	CHECKED BY:	DATE:	SHEET
CTW	PFW	01/23/2019	1 OF 1

GARDELS PIT

20000

40137

25000

50000

75000

BROWNWOOD PIT

20115

25000

KIRTRIGHT PIT

50000

25000

CHALLENGER PIT

40000

T005N R068W

LEGEND

TRANSMISSIVITY ISOLINE [GPD/FT] MINOR 5,000

TRANSMISSIVITY ISOLINE [GPD/FT] MINOR 25,000

ALLUVIAL TRIBUTARY AQUIFER

TRANSMISSIVITY ISOLINE SOURCE: CDSS GIS

0 2500 5000 Feet

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COULSON GRAVEL PONDS AUGMENTATION PLAN

LARIMER & WELD COUNTIES

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FIGURE 3
ALLUVIAL AQUIFER TRANSMISSIVITY

SCALE	DWG NO.	REV.
1"=2,500'	FIGURE 3.DWG	REV

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FIGURE 4 - GARDELS PIT
POND AREAS

SCALE	DWG NO.	REV.
1"=150'	FIGURE 4.DWG	REV

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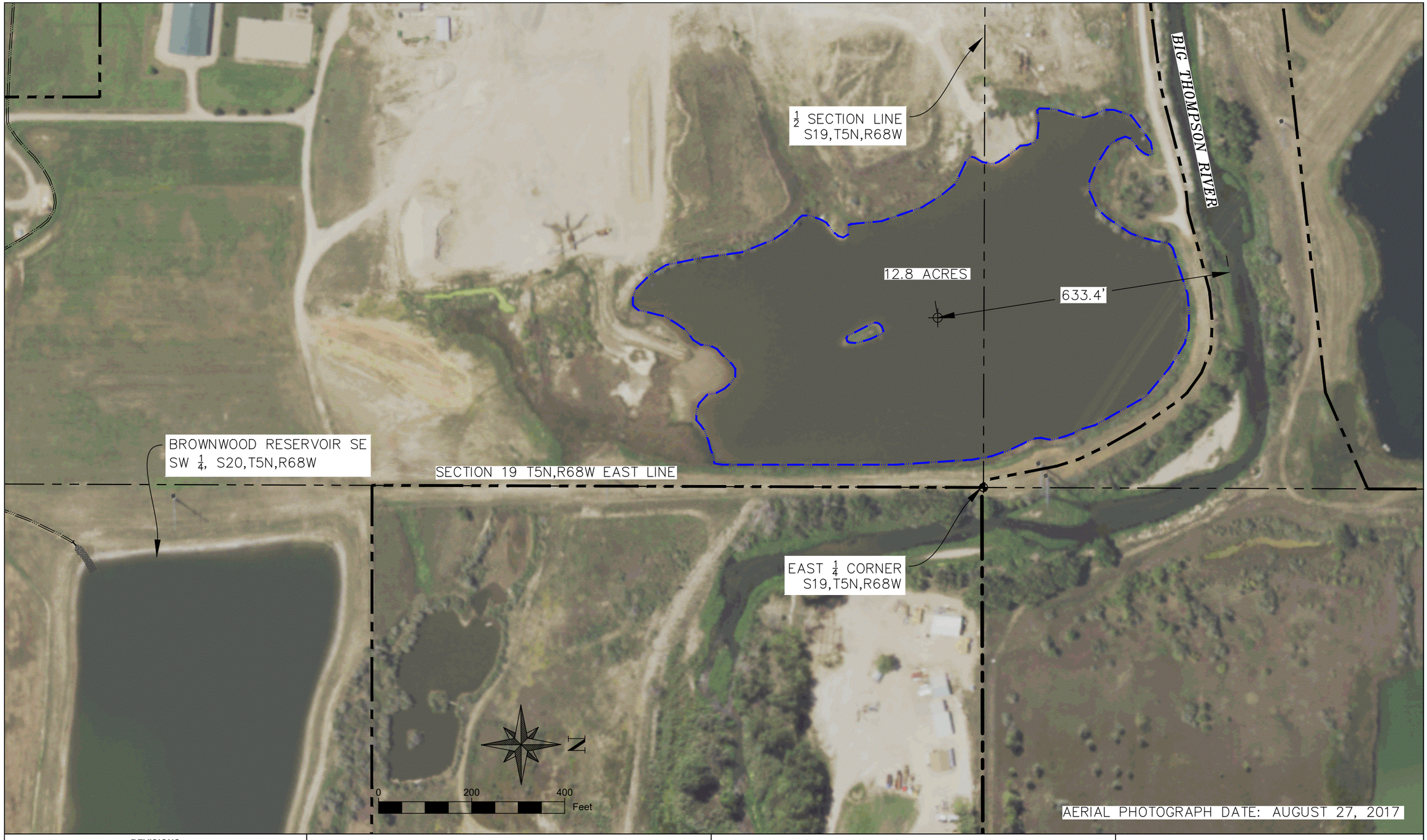

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FIGURE 5
BROWNWOOD PIT POND AREA

SCALE	DWG NO.	REV.
1"=200'	FIGURE 5.DWG	REV

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FIGURE 6
KIRTRIGHT PIT POND AREAS

SCALE	DWG NO.	REV.
1"=250'	FIGURE 6.DWG	REV

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FIGURE 7
CHALLENGER PIT POND AREAS

SCALE	DWG NO.		REV.
1"=200'	FIGURE 7.DWG		REV
DRAWN BY: CTW	CHECKED BY: PFW	DATE: 01/31/2019	SHEET 1 OF 1

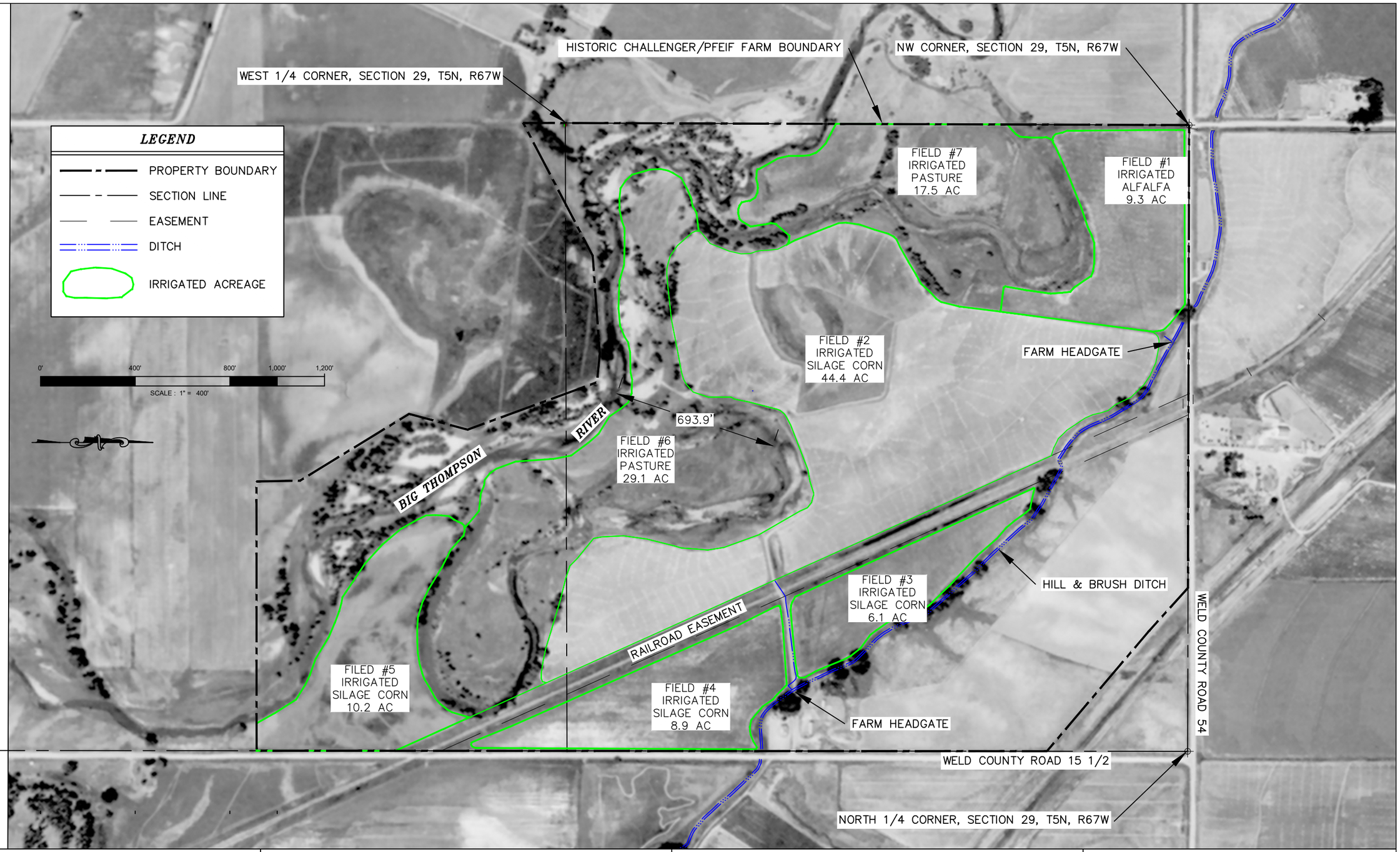

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FIGURE 8 - CHALLENGER/PFEIF FARM IRRIGATED ACREAGE - 1950

SCALE	DWG NO.	REV.
1"=400'	FIGURE 7 CHALLENGER 1950.DWG	REV

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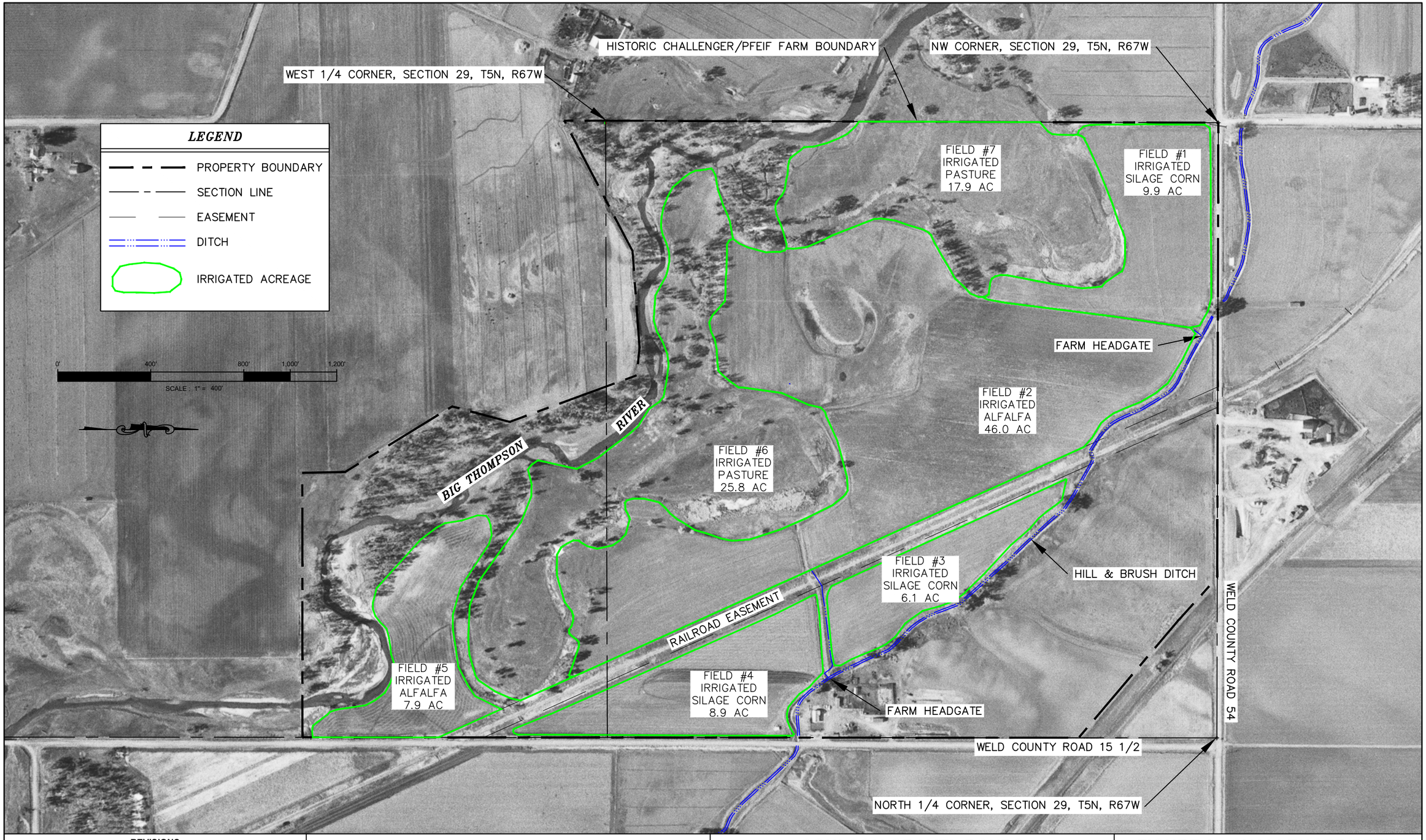

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WELD COUNTY

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FIGURE 9 - CHALLENGER/PFEIF FARM IRRIGATED ACREAGE - 1969

SCALE	DWG NO.	REV.
1"=400'	FIGURE 8 CHALLENGER 1969.DWG	REV

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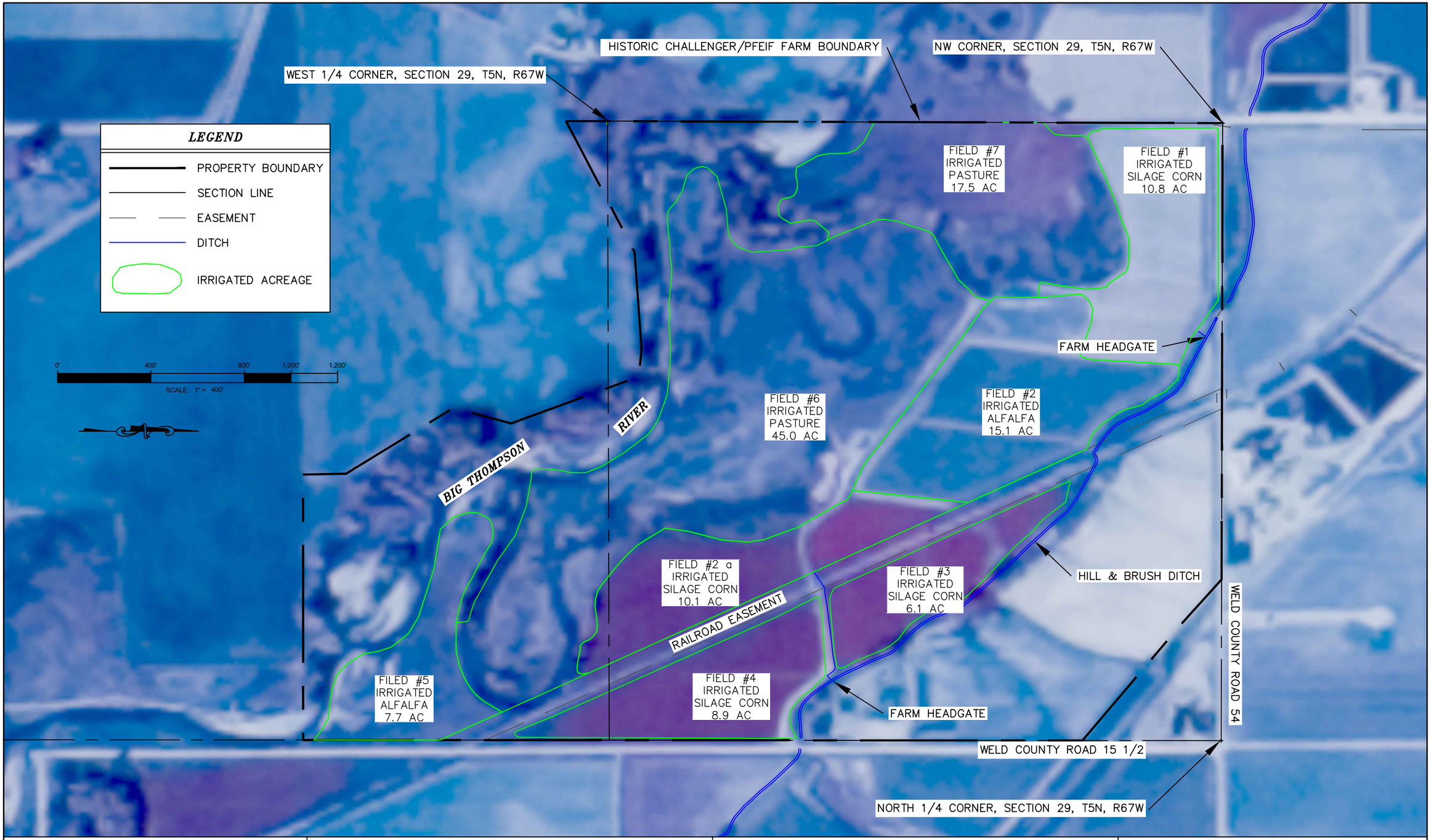

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COULSON GRAVEL PONDS AUGMENTATION PLAN

WELD COUNTY

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FIGURE 10 - CHALLENGER/PFEIF FARM IRRIGATED ACREAGE - 1984

SCALE	DWG NO.	REV.
1"=400'	FIGURE 10 CHALLENGER 1969.DWG	REV

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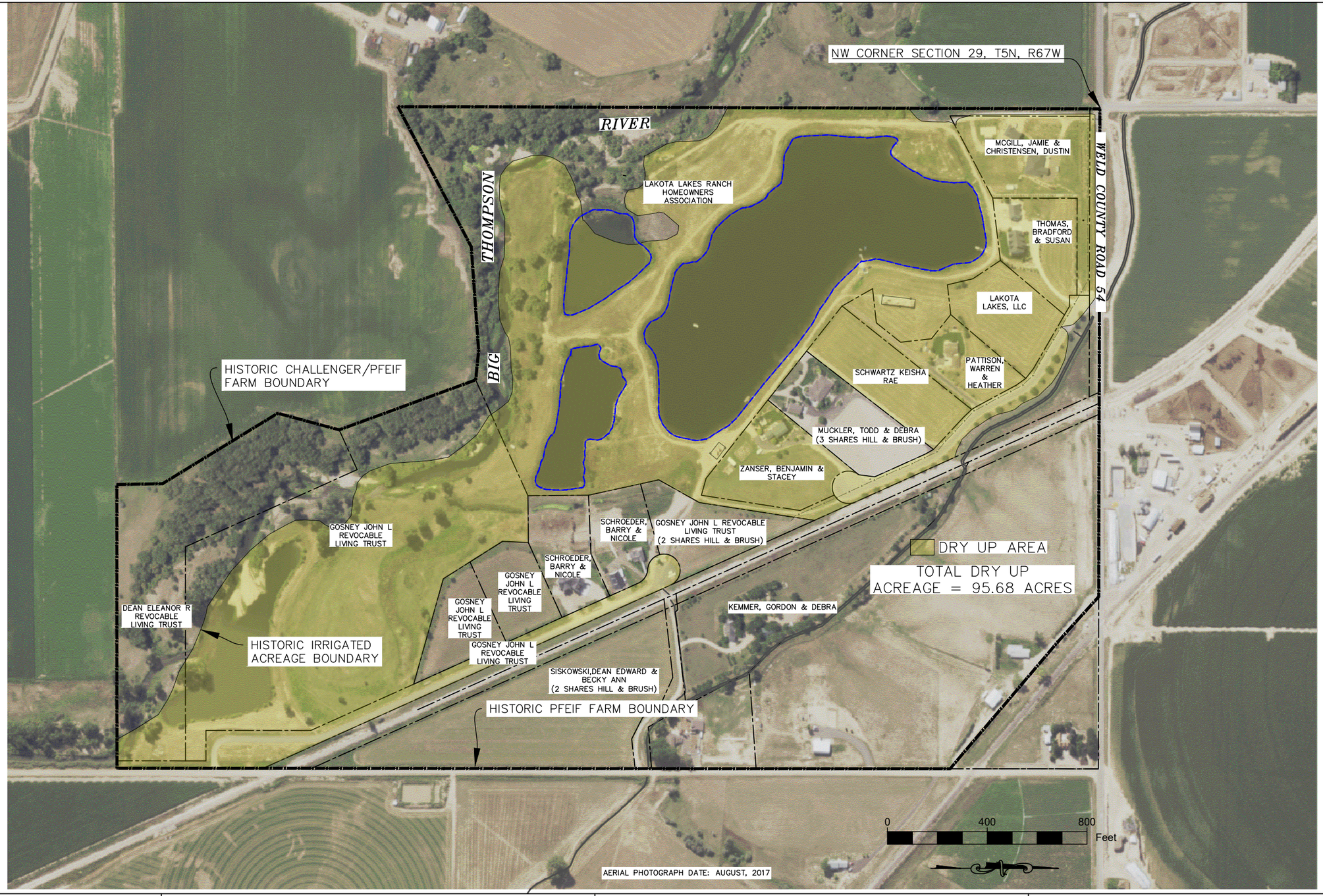

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COULSON GRAVEL PONDS
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FIGURE 11
CHALLENGER/PFEIF DRY UP

SCALE	DWG NO.	REV.
1"=400'	FIGURE 11 DRY UP.DWG	REV

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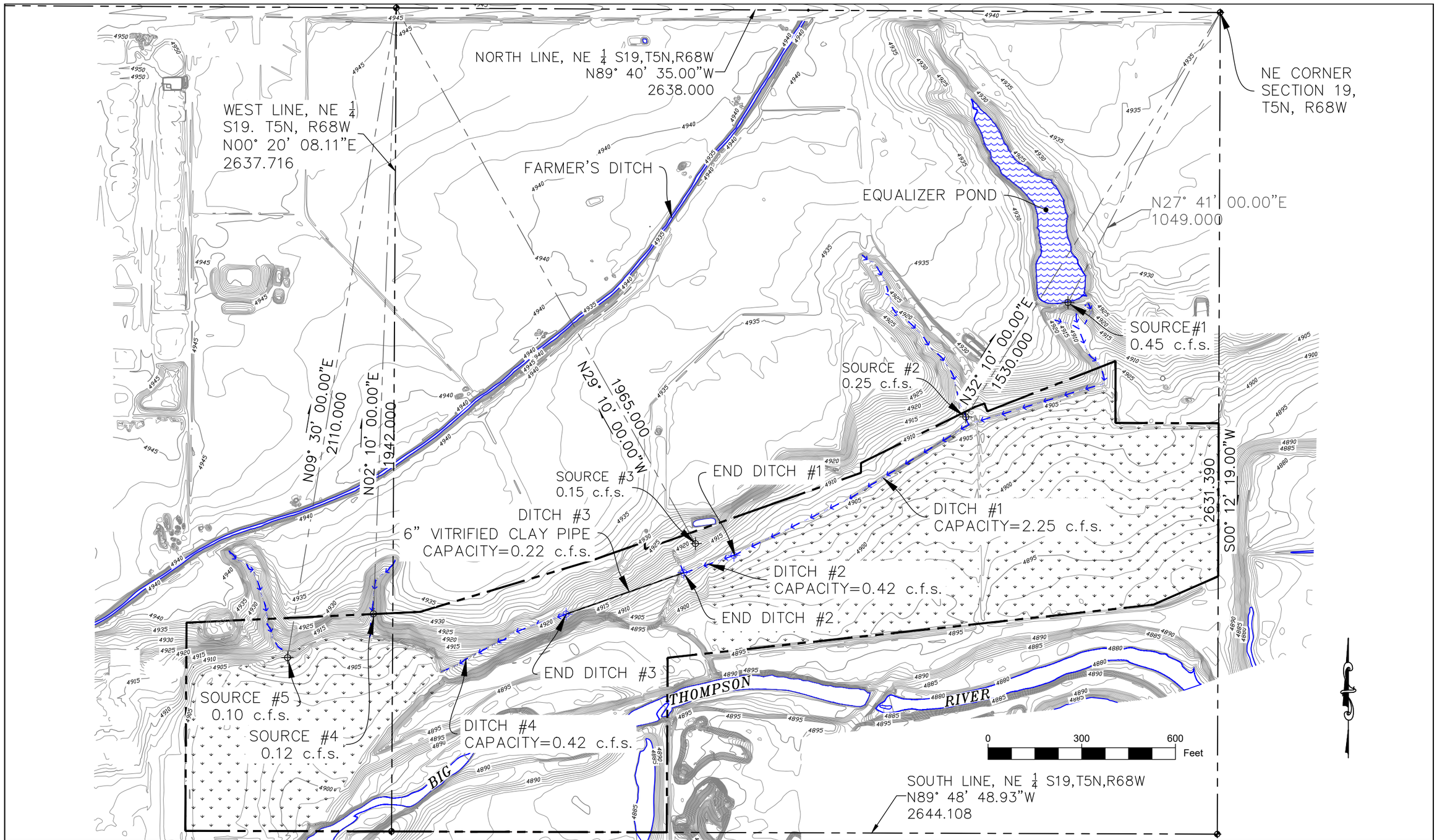

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FIGURE 12
OSBORN IRRIGATION SYSTEM

SCALE	DWG NO.	REV.
1"=300'	FIGURE 12 OSB. IRR. SYS.DWG	REV

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FIELD #3
10.9 ACRES

0.7 c.f.s.

FIELD #2 9.06
ACRES

0.37 c.f.s.

FIELD #1
8.34 ACRES

THOMPSON

RIVER

SE CORNER, NE $\frac{1}{4}$
S19,T5N,R68W

BIG

0 250 500 Feet

N

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LARIMER COUNTY

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FIGURE 13 - OSBORN FARM IRRIGATED ACREAGE 1953

SCALE	DWG NO.	REV.
1"=250'	FIGURE 13 1953.DWG	REV

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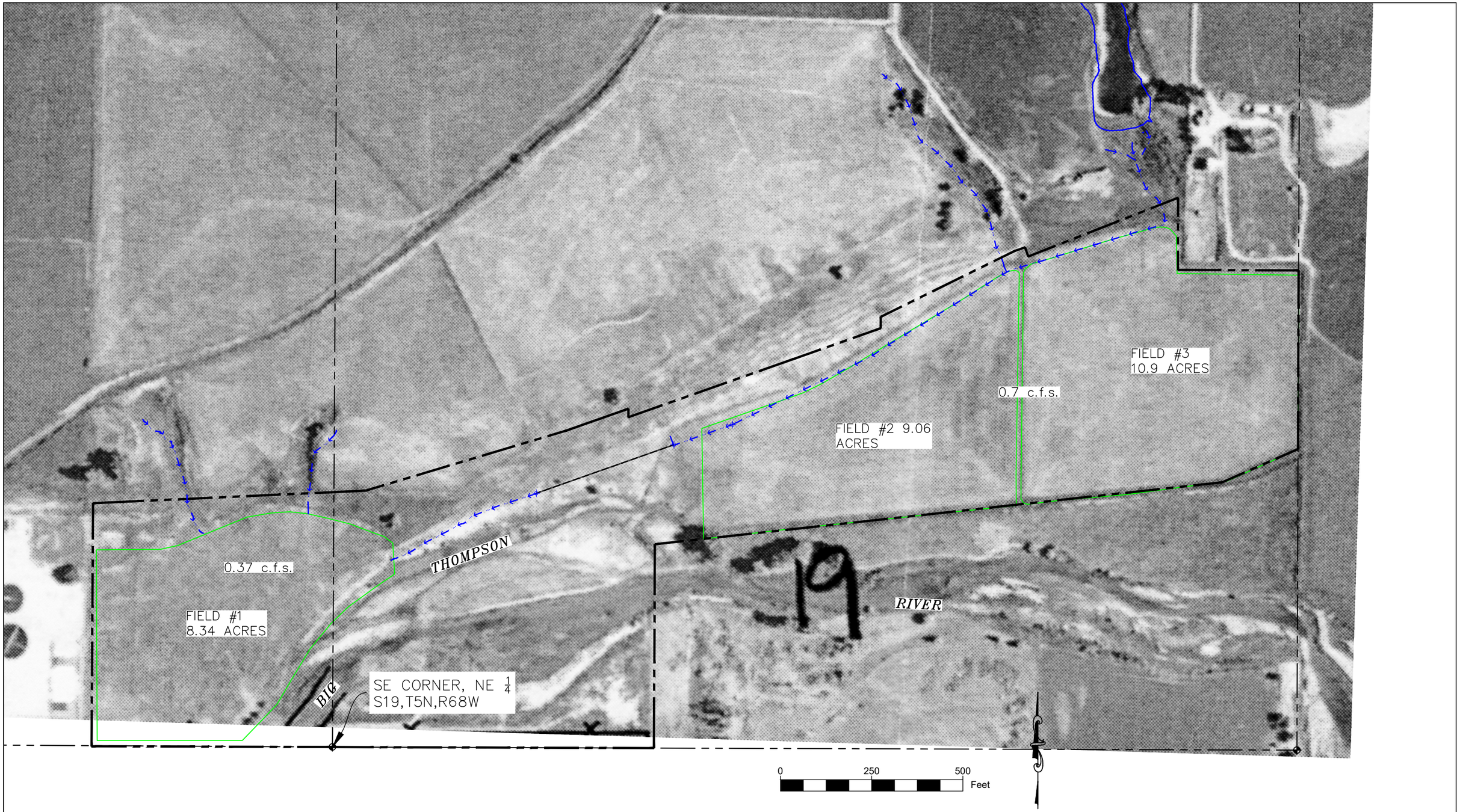

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COULSON GRAVEL PONDS AUGMENTATION PLAN

LARIMER COUNTY

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FIGURE 14 - OSBORN FARM IRRIGATED ACREAGE 1963

SCALE	DWG NO.	REV.
1"=250'	FIGURE 14 1963.DWG	REV

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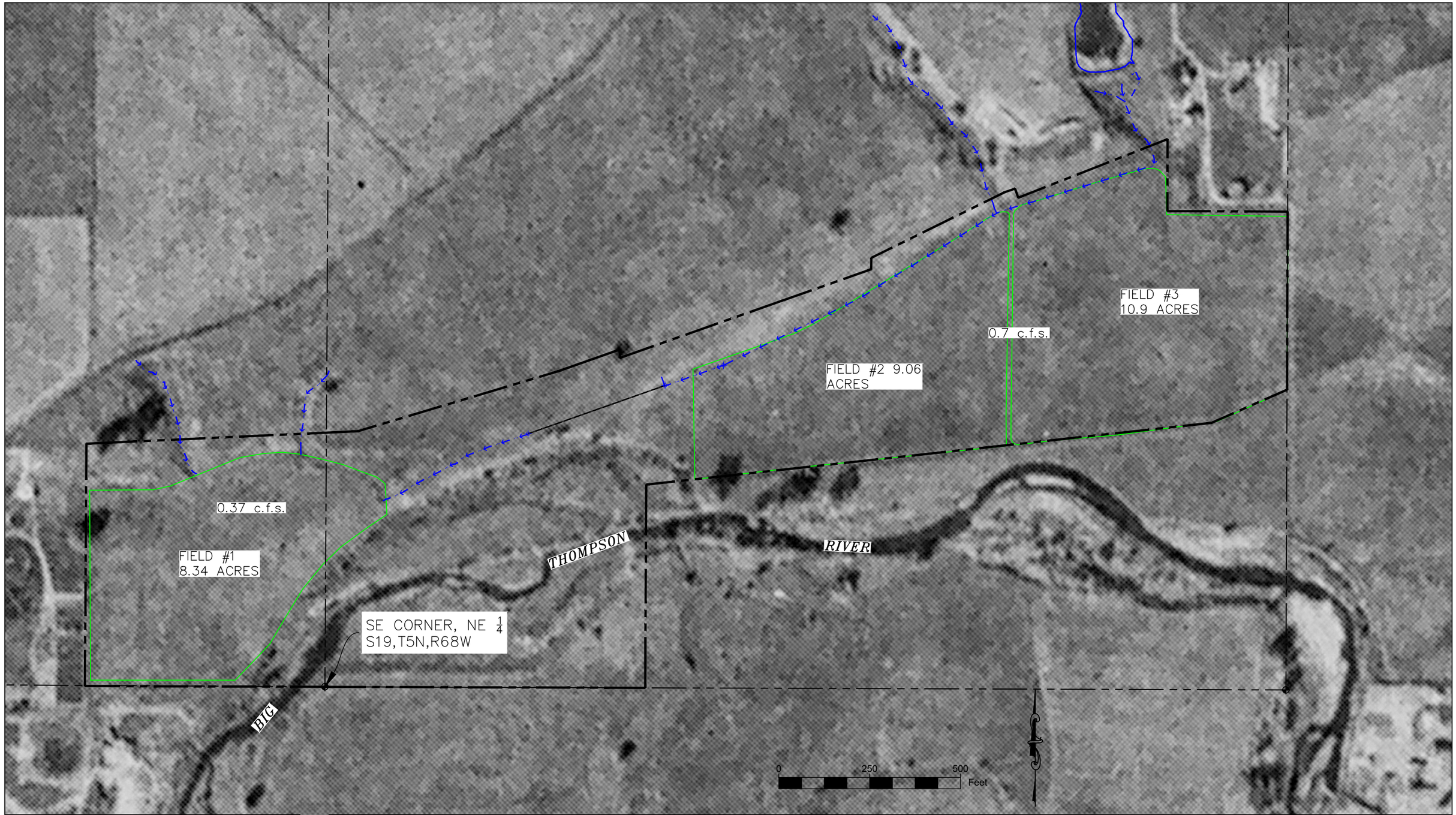

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COULSON GRAVEL PONDS AUGMENTATION PLAN

LARIMER COUNTY

PREPARED FOR: COULSON EXCAVATING CO., INC.

FIGURE 15 - OSBORN FARM IRRIGATED ACREAGE 1970

SCALE	DWG NO.	REV.
1"=250'	FIGURE 15 1970.DWG	REV

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COULSON GRAVEL PONDS
AUGMENTATION PLAN
LARIMER COUNTY
PREPARED FOR: COULSON EXCAVATING CO., INC.

FIGURE 16 - OSBORN FARM
IRRIGATED ACREAGE 2005

SCALE	DWG NO.	REV.
1"=250'	FIGURE 16 2005.DWG	REV

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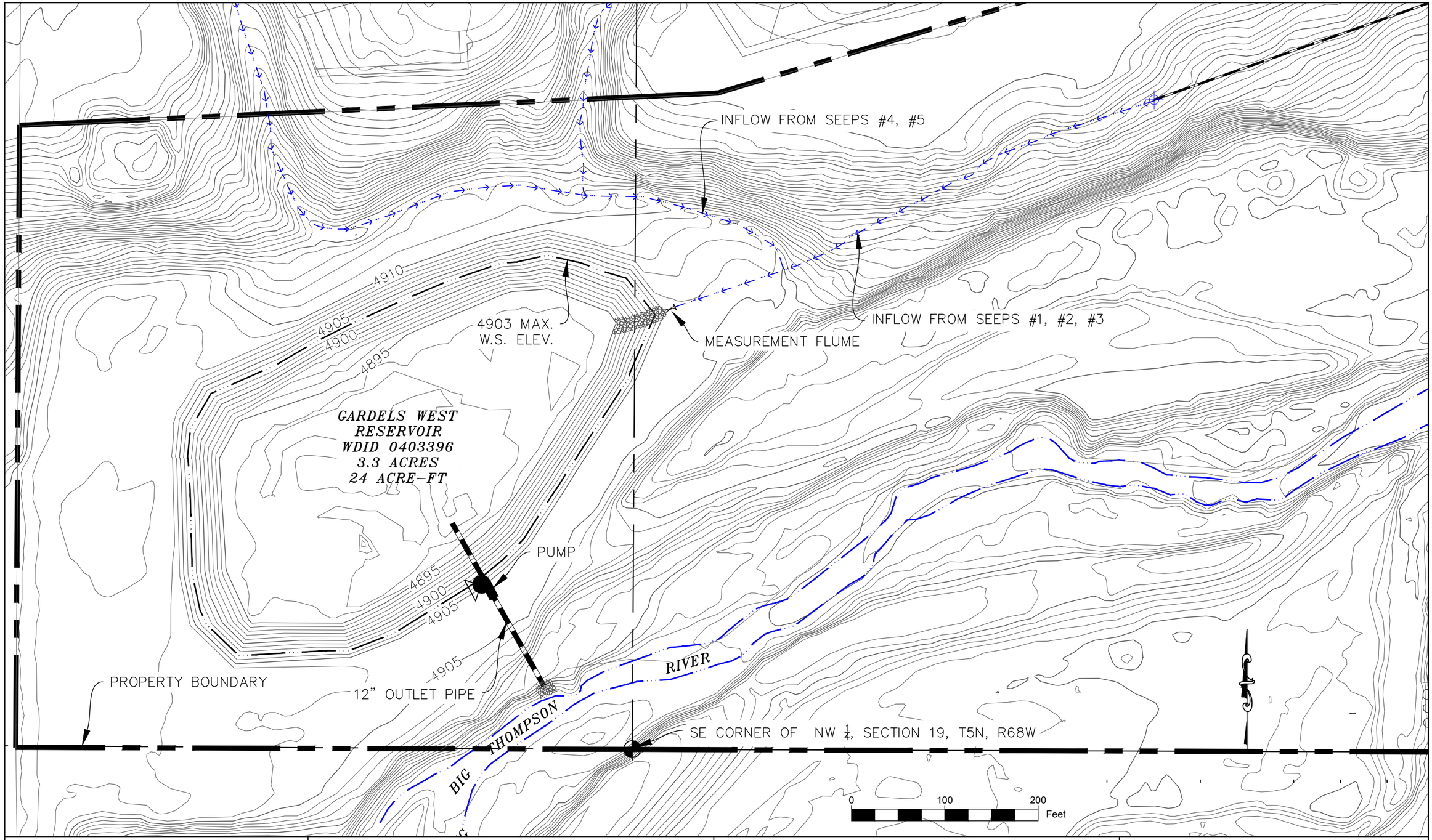

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REV	DESCRIPTION	DATE	APPROVED

Weiland, Inc.
Environmental & Engineering
PO BOX 18087
BOULDER, CO. 80308
ph 303-443-9521
fax 303-443-9536

COULSON GRAVEL PONDS AUGMENTATION PLAN

LARIMER COUNTY

PREPARED FOR: COULSON EXCAVATING CO., INC.

FIGURE 17
GARDELS WEST RESERVOIR

SCALE	DWG NO.	REV.
1"=100'	FIGURE 17 GARDELS WEST RES.DWG	REV

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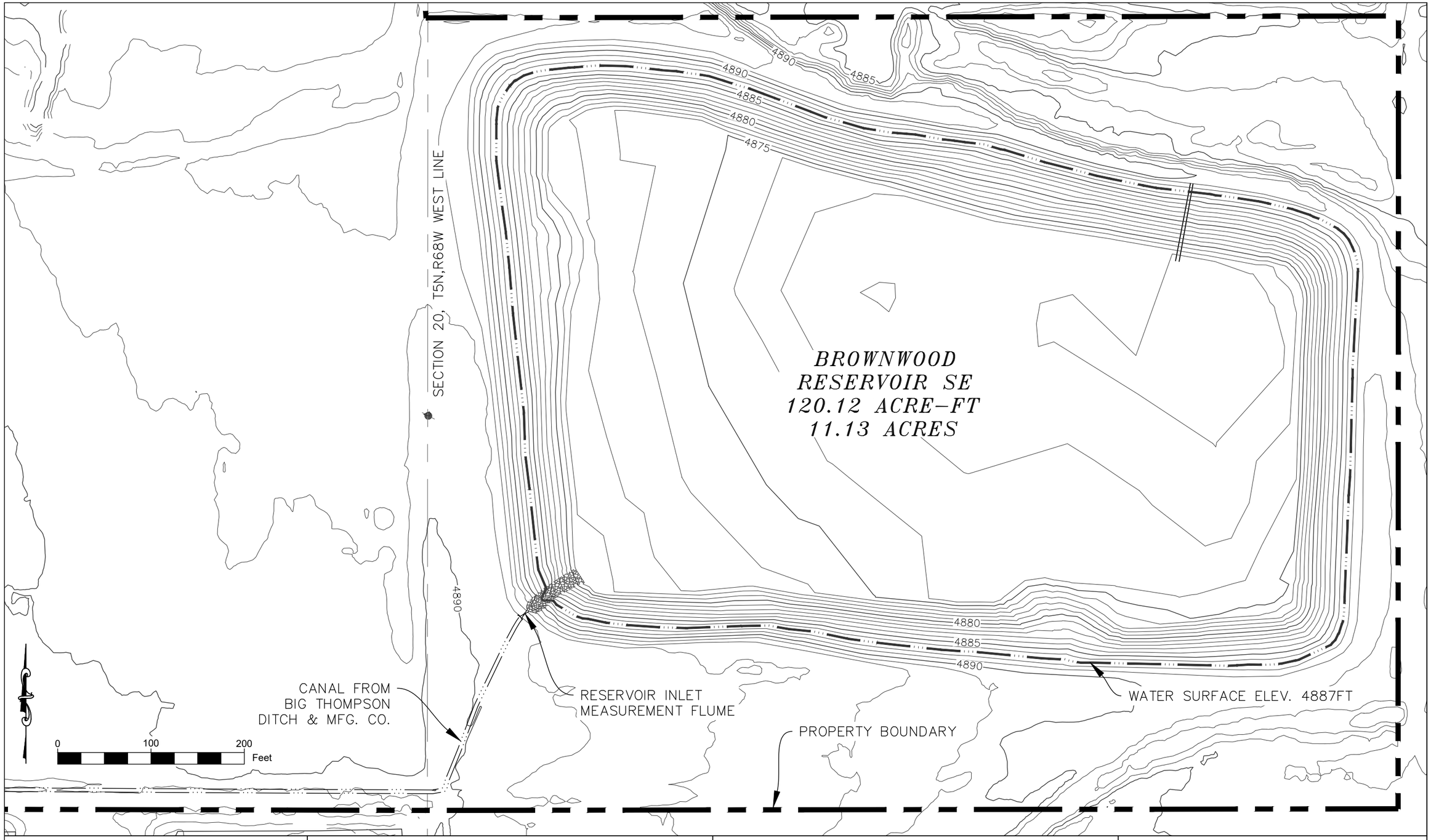

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COULSON GRAVEL PONDS
AUGMENTATION PLAN
LARIMER COUNTY, CO

PREPARED FOR:
COULSON EXCAVATING, CO., INC.

FIGURE 18
BROWNWOOD RESERVOIR SE

SCALE	DWG NO.	REV.
1"=100'	FIGURE 18.DWG	REV

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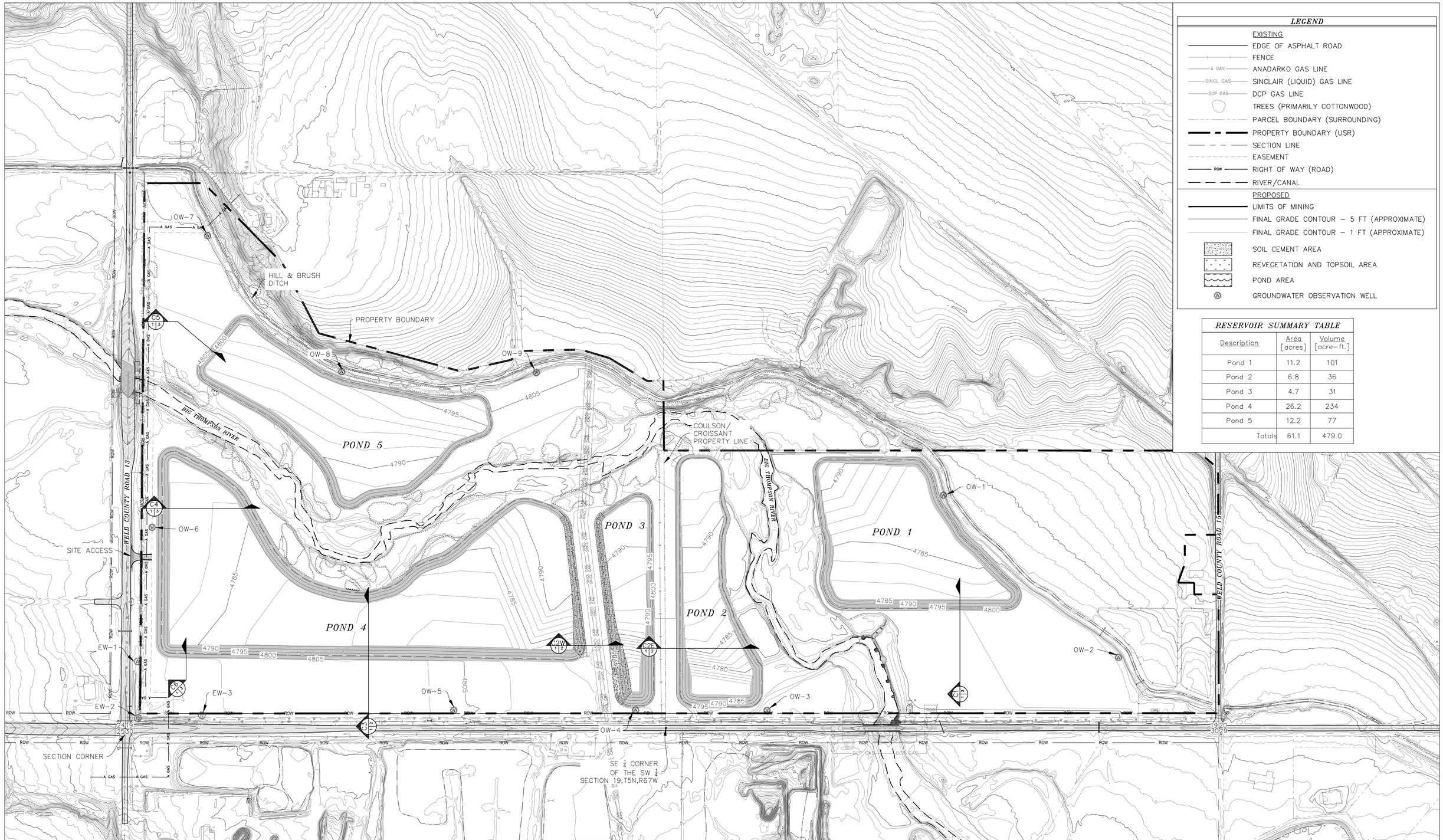

LEGEND

EXISTING

- EDGE OF ASPHALT ROAD
- FENCE
- ANADARKO GAS LINE
- SINCLAIR (LIQUID) GAS LINE
- DCP GAS LINE
- TREES (PRIMARILY COTTONWOOD)
- PARCEL BOUNDARY (SURROUNDING)
- PROPERTY BOUNDARY (USR)
- SECTION LINE
- EASEMENT
- RIGHT OF WAY (ROAD)
- RIVER/CANAL

PROPOSED

- LIMITS OF MINING
- FINAL GRADE CONTOUR – 5 FT (APPROXIMATE)
- FINAL GRADE CONTOUR – 1 FT (APPROXIMATE)
- SOIL CEMENT AREA
- REVEGETATION AND TOPSOIL AREA
- POND AREA
- GROUNDWATER OBSERVATION WELL

RESERVOIR SUMMARY TABLE

Description	Area [acres]	Volume [acre-ft.]
Pond 1	11.2	101
Pond 2	6.8	36
Pond 3	4.7	31
Pond 4	26.2	234
Pond 5	12.2	77
Totals	61.1	479.0

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COULSON GRAVEL PONDS AUGMENTATION PLAN

WELD COUNTY, CO

PREPARED FOR: COULSON EXCAVATING CO., INC.

FIGURE 19
PROPOSED AMEN RESERVOIRS

SCALE	DWG NO.	REV.
1"=200'	FIGURE 19.DWG	REV

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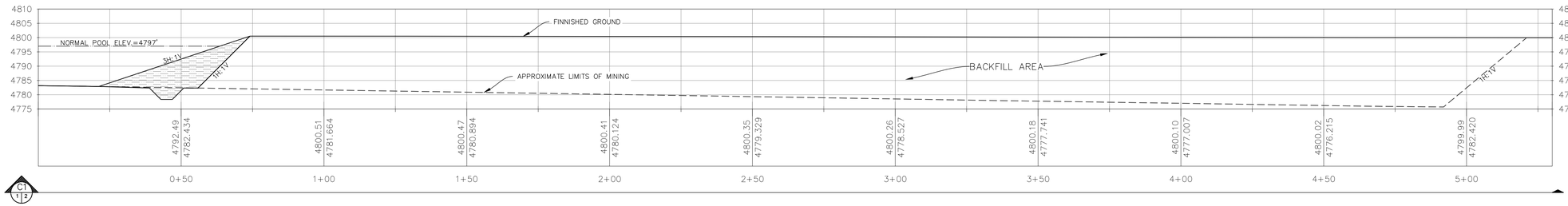
CELL 1

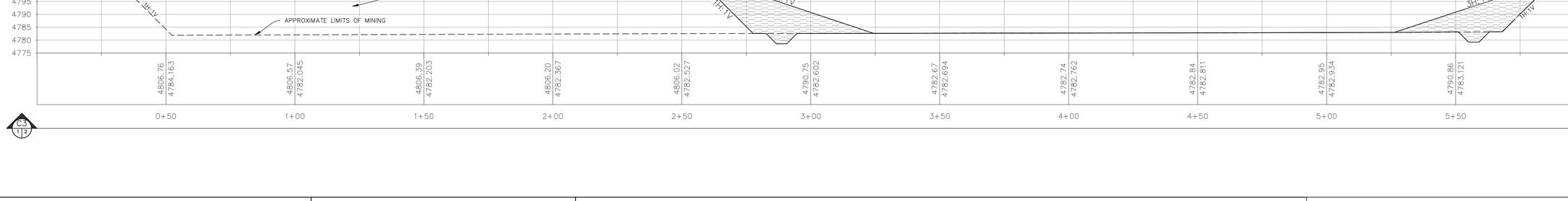


KEY

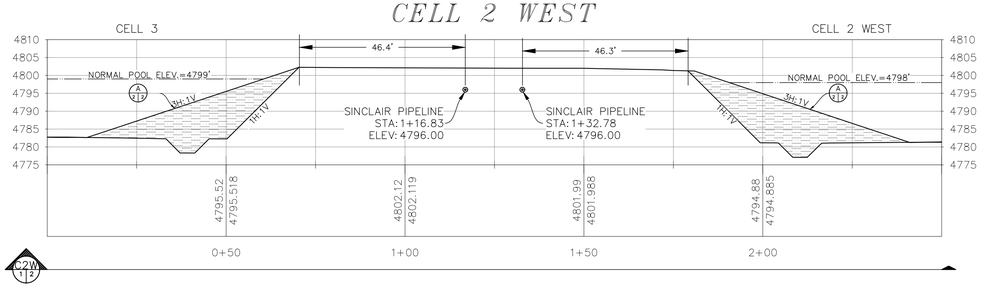
- PROPOSED COMPACTED CLAY LINER
- LIMITS OF MINING
- FINISHED GROUND

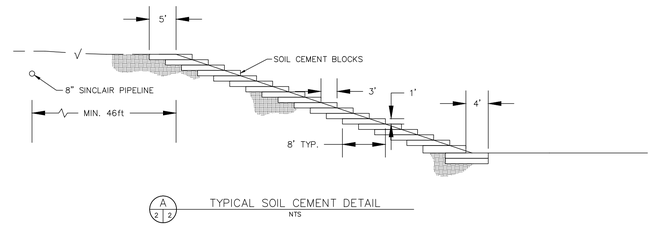
0 20 40 Feet

CELL 2 EAST



CELL 2 WEST





CELL 3

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COULSON GRAVEL PONDS AUGMENTATION PLAN

WELD COUNTY

PREPARED FOR:

COULSON EXCAVATING CO., INC.

FIGURE 19

PROPOSED AMEN RESERVOIRS

SCALE	DWG NO.	REV.
1"=20'	FIGURE 19 2.DWG	REV

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CTW	PFW	2/15/2019	SHEET 2 OF 2