

Stream: Armstrong Creek

Executive Summary

Water Division: 6
Water District: 44
CDOW#: 19035
CWCB ID#: 06/06/A-013

Segment: Headwaters to Elkhead Creek

Upper Terminus: Headwaters

Latitude: 40d45'43.66"N Longitude: 107d04'20.27"W
UTM North: 4514417.229 UTM East: 325085.746
SE1/4, SE1/4, Sctn6, T9N, R86W, 6th PM
736 ft W of the E Section Line, 204 ft, N of the S Section Line

Lower Terminus: Elkhead Creek

Latitude: 40d44'43.11"N Longitude: 107d08'11.65"W
UTM North: 4512680.197 UTM East: 319614.994
NE1/4, NW1/4, Sctn15, T9N, R87W, 6th PM
2135 ft E of the W Section Line, 671 ft, S of the N Section Line

Counties: Routt

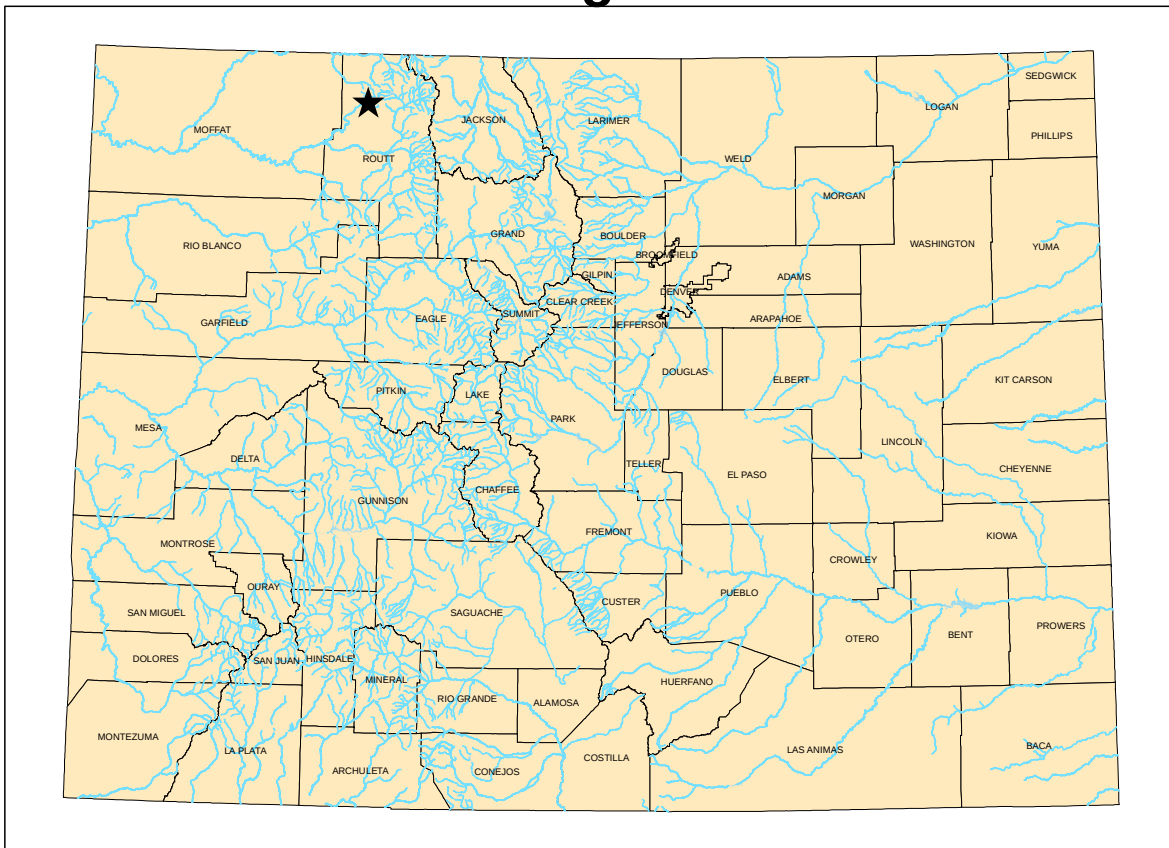
Length: 4.63 miles

USGS Quad(s): Meaden Peak, Pilot Knob, Quaker Mountain

ISF Appropriation: 1.0 cfs (04/01 – 07/15)
 0.25 cfs (07/16 – 03/31)



Armstrong Creek



Summary

The information contained in this report and the associated instream flow file folder forms the basis for the instream flow recommendation to be considered by the Board. It is staff's opinion that the information contained in this report is sufficient to support the findings required in Rule 5 i.

Colorado's Instream Flow Program was created in 1973 when the Colorado State Legislature recognized "the need to correlate the activities of mankind with some reasonable preservation of the natural environment" (see 37-92-102 (3) C.R.S.). The statute vests the CWCB with the exclusive authority to appropriate and acquire instream flow and natural lake level water rights. In order to encourage other entities to participate in Colorado's Instream Flow Program, the statute directs the CWCB to request instream flow recommendations from other state and federal agencies. The Colorado Division of Wildlife (CDOW) recommended this segment of Armstrong Creek to the CWCB for inclusion into the Instream Flow Program. Armstrong Creek is being considered for inclusion into the Instream Flow Program because it has a natural environment that can be preserved to a reasonable degree with an instream flow water right.

The CDOW is forwarding this stream flow recommendation to the CWCB to meet the State of Colorado's policy "... that the wildlife and their environment are to be protected, preserved,

enhanced, and managed for the use, benefit, and enjoyment of the people of this state and its visitors ... and that, to carry out such program and policy, there shall be a continuous operation of planning, acquisition, and development of wildlife habitats and facilities for wildlife-related opportunities” C.R.S. 33-1-101 (1). The CDOW Strategic Plan states “Healthy aquatic environments are essential to maintain healthy and viable fisheries, and critical for self-sustaining populations. The Division desires to protect and enhance the quality and quantity of aquatic habitats.”

Armstrong Creek is approximately 4.6 miles long. It begins on the west side of Meaden Peak at an elevation of approximately 9850 feet and terminates at the confluence with Elkhead Creek at an elevation of approximately 7900 feet. Of the 4.6 mile segment addressed by this report, approximately 100% of the segment, or 4.6 miles, is located on public lands. Armstrong Creek is located within Routt County. The total drainage area of the river is approximately 3.5 square miles. Armstrong Creek generally flows in a westerly direction.

The subject of this report is a segment of Armstrong Creek beginning at its headwaters and extending downstream to Elkhead Creek. The proposed segment is located northeast of the Town of Craig. The staff has received one recommendation for this segment from the CDOW. The recommendation for this segment is discussed below.

Instream Flow Recommendation(s)

The CDOW has recommended 1.0 cfs, summer, and 0.4 cfs, winter, based on their data collection efforts (see Table 1 and Appendix A). The modeling results from this survey effort are within the confidence interval produced by the R2CROSS model.

Land Status Review

Upper Terminus	Lower Terminus	Total Length (miles)	Land Ownership	
			% Private	% Public
Headwaters	Elkhead Creek	4.6	0	100

100% of the public lands are owned by the USFS.

Biological and Field Survey Data

As reported in the letter from CDOW to the CWCB “The DOW, in July of 2005, collected stream cross section information, natural environment data, and other data needed to quantify the instream flow needs for this reach of Armstrong Creek. Armstrong Creek is classified as a minor stream (between 4 to 9 feet wide) and fishery surveys indicate the stream environment of Armstrong Creek supports Colorado River cutthroat trout (*Salmo clarki pleuriticus*), Brook trout (*Salvelinus fontinalis*), Mountain sucker (*Catostomus platyrhynchus*), White sucker (*Catostomus commersoni*), Longnose sucker (*Catostomus catostomus*), Longnose dace (*Rhinichthys cataractae*), Speckled dace (*Rhinichthys osculus*) and Mottled sculpin (*Cottus bairdi*).

Colorado River cutthroat trout and Mountain sucker have been identified by the DOW and several other state and federal agencies as “species of greatest conservation need”. DOW is involved in developing Conservation and Management Plans for these species. The intention of these plans is to increase populations and distributions of identified species, thereby assisting in

the long-term persistence of each species. The success of such plans could potentially curtail the need for federal listing of these species under the Endangered Species Act (ESA). These species are not currently federally listed” (See CDOW Fish Survey in Appendix B).

Field Survey Data

CDOW staff used the R2CROSS methodology to quantify the amount of water required to preserve the natural environment to a reasonable degree. The R2CROSS method requires that stream discharge and channel profile data be collected in a riffle stream habitat type. Riffles are most easily visualized, as the stream habitat types that would dry up first should streamflow cease. This type of hydraulic data collection consists of setting up a transect, surveying the stream channel geometry, and measuring the stream discharge. Appendix B contains copies of field data collected for this proposed segment.

Biological Flow Recommendation

The CWCB staff relied upon the biological expertise of the cooperating agencies to interpret output from the R2CROSS data collected to develop the initial, biologic instream flow recommendation. This initial recommendation is designed to address the unique biologic requirements of each stream without regard to water availability. Three instream flow hydraulic parameters, average depth, percent wetted perimeter, and average velocity are used to develop biologic instream flow recommendations. The CDOW has determined that maintaining these three hydraulic parameters at adequate levels across riffle habitat types, aquatic habitat in pools and runs will also be maintained for most life stages of fish and aquatic invertebrates (Nehring 1979; Espregren 1996).

For this segment of stream, one data set was collected with the results shown in Table 1 below. Table 1 shows who collected the data (Party), the date the data was collected, the measured discharge at the time of the survey (Q), the accuracy range of the predicted flows based on Manning’s Equation (240% and 40% of Q), the summer flow recommendation based on meeting 3 of 3 hydraulic criteria and the winter flow recommendation based upon 2 of 3 hydraulic criteria.

Table 1: Data

Party	Date	Q	250%-40%	Summer (3/3)	Winter (2/3)
DOW	07/26/2005	0.42	1.0 – 0.2	1.0	0.4

DOW = Division of Wildlife

Biologic Flow Recommendation

The summer flow recommendation, which met 3 of 3 criteria and is within the accuracy range of the R2CROSS model is 1.0 cfs (See Table 1). The winter flow recommendation, which met 2 of 3 criteria and is within the accuracy range of the R2CROSS model range is 0.4 cfs (See Table 1).

Hydrologic Data

After receiving the cooperating agency’s biologic recommendation, the CWCB staff conducted an evaluation of the stream hydrology to determine if water was physically available for an instream flow appropriation. The hydrograph below was derived from data collected by the USGS stream gage for Elkhead Creek near Clark, CO (#09244500), which has a drainage area of

45.4 square miles (See Gage Summary in Appendix C). The total drainage area of this segment of the Armstrong Creek is approximately 3.54 square miles. The period of record for this gage was 1942 to 1973, the period of record used by staff in their analysis was 1942 - 1973, or 19 years of record. Table 2 below displays the estimated flow of Armstrong Creek at the gage, in terms of a percentage of exceedence.

Table 2: Estimated Stream Flow for Armstrong Creek

Exceedence	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1%	0.50	0.39	1.44	31.19	48.36	26.99	2.71	0.91	1.01	0.86	0.78	0.59
5%	0.40	0.39	0.78	22.46	40.20	17.15	2.03	0.64	0.63	0.69	0.64	0.50
10%	0.34	0.34	0.60	14.04	35.82	15.28	1.72	0.54	0.44	0.62	0.58	0.39
20%	0.31	0.31	0.47	7.80	28.04	10.92	1.33	0.40	0.36	0.51	0.44	0.37
50%	0.25	0.23	0.30	2.34	15.75	4.44	0.71	0.26	0.22	0.30	0.31	0.27
80%	0.17	0.19	0.23	0.86	8.89	2.11	0.30	0.14	0.11	0.18	0.22	0.17
90%	0.14	0.17	0.20	0.43	6.99	1.25	0.22	0.08	0.07	0.16	0.19	0.16
95%	0.14	0.12	0.17	0.31	5.13	0.94	0.15	0.05	0.05	0.15	0.18	0.14
99%	0.14	0.12	0.16	0.20	3.34	0.50	0.10	0.03	0.05	0.07	0.16	0.14

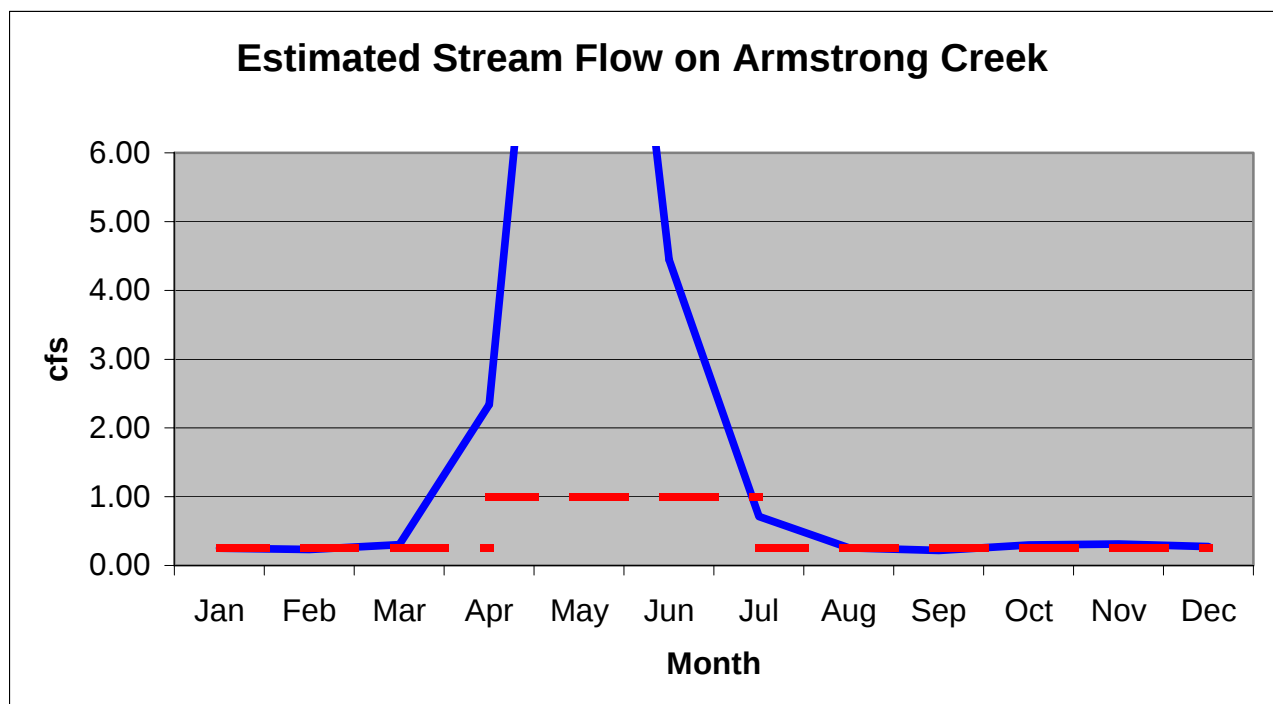


Table 2 shows that the summer flow recommendation of 1.0 cfs is available at least 50% of the time for the month of April 1st through July 15th. The winter flow recommendation of 0.4 cfs is not available at least 50% of the time from July 16th through March 31st. Based on water availability, the winter recommendation was further reduced to 0.25 cfs for the time period of July 16th through March 31st.

Precipitation Data

Staff reviewed a local precipitation data set from 1 site located near the Elkhead Drainage (see Precipitation Data in Appendix C). Table 3 shows the water year and the percent of average precipitation recorded at each site. It is staff's opinion that the 19 years of stream-flow data analyzed is representative of average water-years.

Table 3: Precipitation Data as a percentage of Average

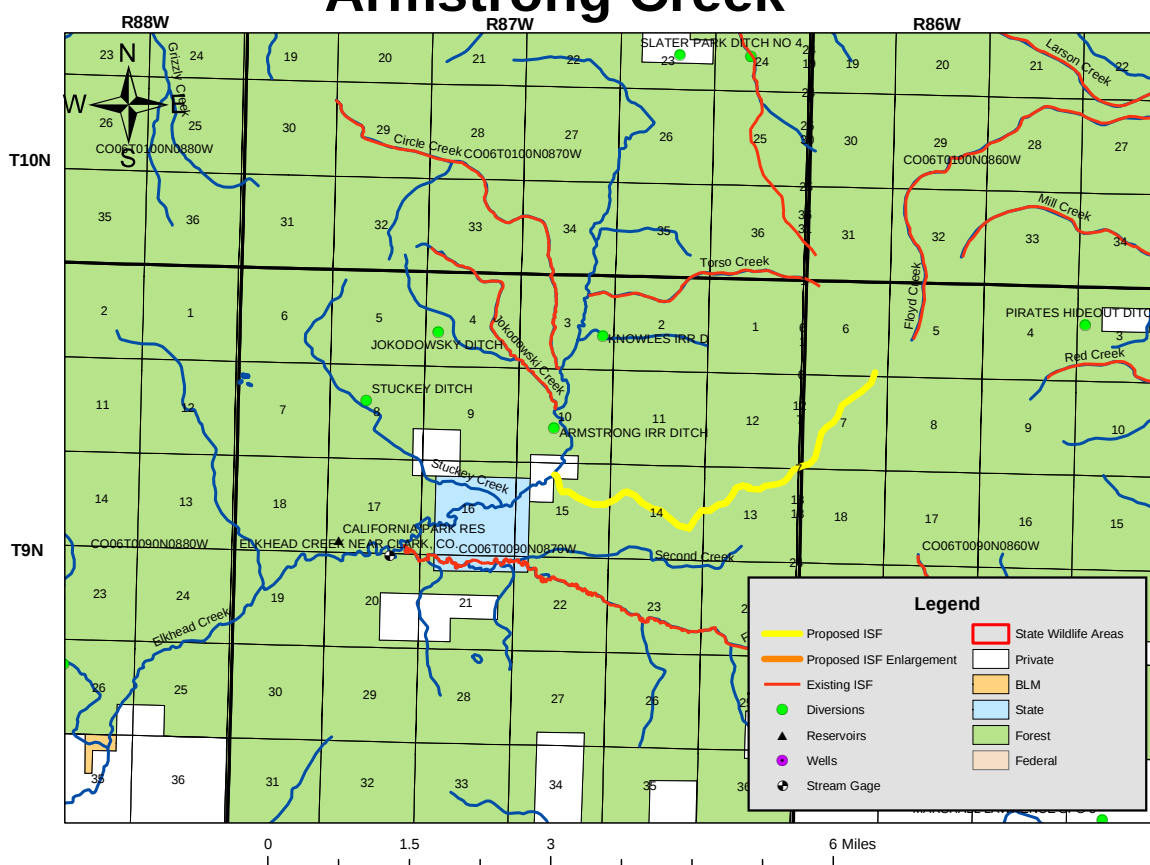
Year	Craig Elevation=5690 Lat=40.31 Long=-107.33
1942	73%
1943	80%
1944	102%
1945	157%
1946	112%
1947	131%
1949	117%
1950	91%
1951	139%
1952	92%
1953	108%
1954	102%
1955	90%
1956	69%
1957	139%
1958	56%
1959	106%
1960	69%
1961	94%
1962	67%
1963	94%
1964	110%
1965	104%
1966	74%
1967	125%
1968	96%
1969	125%
1970	120%
1971	83%
1972	86%
1973	94%
Average	100%

Table 3 shows that the 19 years of stream flow data analyzed is representative of average water years.

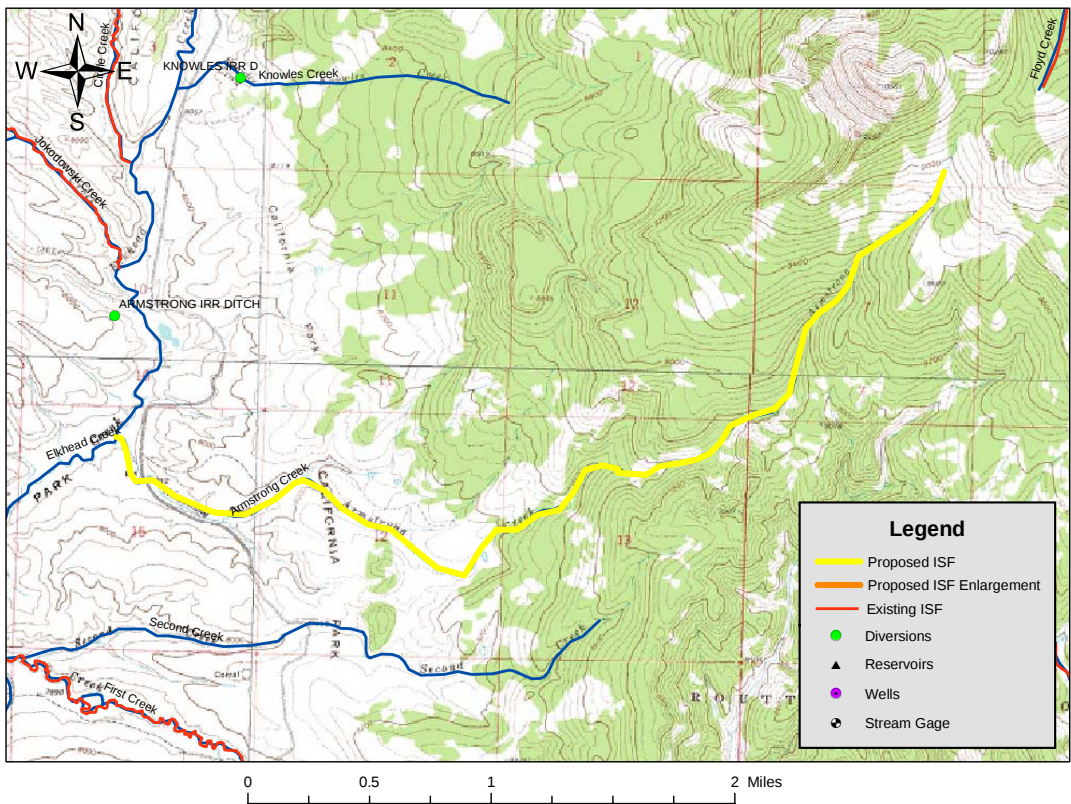
Existing Water Right Information

Staff has analyzed the water rights tabulation and consulted with the Division Engineer's Office (DEO) to identify any potential water availability problems. Records indicate that there are no surface water diversions that are located within this reach of Armstrong Creek. According to the DEO, there is usually sufficient water available within this stream reach to satisfy the recommended instream flow amount. Based on this analysis, staff has determined that water is available for appropriation on Armstrong Creek, from the headwaters to the confluence with Elkhead Creek, to preserve the natural environment to a reasonable degree without limiting or foreclosing the exercise of valid existing water rights.

Armstrong Creek



Armstrong Creek



CWCB Staff's Instream Flow Recommendation

Based on the CDOW recommendation, staff recommends the Board form its intent to appropriate on the following stream reach:

Stream Name: Armstrong Creek

Segment:

Upper Terminus: Headwaters

Latitude: 40d45'43.66"N Longitude: 107d04'20.27"W

UTM North: 4514417.229 UTM East: 325085.746

SE1/4, SE1/4, Sctn6, T9N, R86W, 6th PM

736 ft W of the E Section Line, 204 ft, N of the S Section Line

Lower Terminus: Elkhead Creek

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UTM North: 4512680.197 UTM East: 319614.994

NE1/4, NW1/4, Sctn15, T9N, R87W, 6th PM

2135 ft E of the W Section Line, 671 ft, S of the N Section Line

Counties: Routt

Length: 4.63 miles

USGS Quad(s): Meaden Peak, Pilot Knob, Quaker Mountain

ISF Appropriation: 1.0 cfs (04/01 – 07/15)
 0.25 cfs (07/16 – 03/31)

APPENDIX – A

ISF Recommendation

STATE OF COLORADO

Bill Owens, Governor

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WILDLIFE

AN EQUAL OPPORTUNITY EMPLOYER

Bruce McCloskey, Director
6060 Broadway
Denver, Colorado 80216
Telephone (303) 297-1192



*For Wildlife-
For People*

December 15, 2005

Mr. Dan Merriman and Mr. Todd Doherty
Colorado Water Conservation Board
Stream and Lake Protection Section
1313 Sherman Street, Room 723
Denver, Colorado 80203

Re: Colorado Division of Wildlife Instream Flow Recommendations for Armstrong Creek.

Dear Dan and Todd,

The purpose of this letter is to officially transmit the Colorado Division of Wildlife's (DOW) Instream Flow Recommendations for Armstrong Creek in Routt County. The reach of stream covered by this flow recommendation is from the headwaters of Armstrong Creek to the confluence with Elkhead Creek, a distance of approximately 4.5 miles.

The DOW, in July of 2005, collected stream cross section information, natural environment data, and other data needed to quantify the instream flow needs for this reach of Armstrong Creek. Armstrong Creek is classified as a minor stream (between 4 to 9 feet wide) and fishery surveys indicate the stream environment of Armstrong Creek supports Colorado River cutthroat trout (*Salmo clarki pleuriticus*), Brook trout (*Salvelinus fontinalis*), Mountain sucker (*Catostomus platyrhynchus*), White sucker (*Catostomus commersoni*), Longnose sucker (*Catostomus catostomus*), Longnose dace (*Rhinichthys cataractae*), Speckled dace (*Rhinichthys osculus*) and Mottled sculpin (*Cottus bairdi*).

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The stream cross section data was analyzed using the R2CROSS program. The R2CROSS output was evaluated using the methods described in Nehring (1979) and Espegren (1996). The CDOW has reviewed the data collected to date and based on that review recommends that the CWCB appropriated the following flow amounts to preserve the natural environment of Armstrong Creek to a reasonable degree:

DEPARTMENT OF NATURAL RESOURCES, Russell George, Executive Director
WILDLIFE COMMISSION, Jeffrey Crawford, Chair • Tom Burke, Vice Chair • Ken Torres, Secretary
Members, Bernard Black • Rick Enstrom • Philip James • Claire O'Neal • Brad Phelps • Robert Shoemaker
Ex Officio Members, Russell George and Don Ament

- 1.0 cubic feet per second is recommended for April 1 through September 30. This flow is required to maintain the three principal hydraulic criteria of average depth, average velocity and percent wetted perimeter;
- 0.4 cubic feet per second is recommended for October 1 through March 31. This flow is required to maintain two of the three principal hydraulic criteria of average depth and percent wetted perimeter.

The CDOW is forwarding this stream flow recommendation to the CWCB to meet the State of Colorado's policy "... that the wildlife and their environment are to be protected, preserved, enhanced, and managed for the use, benefit, and enjoyment of the people of this state and its visitors ... and that, to carry out such program and policy, there shall be a continuous operation of planning, acquisition, and development of wildlife habitats and facilities for wildlife-related opportunities." C.R.S. 33-1-101 (1). The CDOW Strategic Plan states "Healthy aquatic environments are essential to maintain healthy and viable fisheries, and critical for self-sustaining populations. The Division desires to protect and enhance the quality and quantity of aquatic habitats."

Please find attached, copies of the field data sheets, the R2CROSS modeling runs, fishery survey information and stream photographs. If you have any questions regarding the attached information or the instream flow recommendations, please feel free to contact me at (303)-291-7267.

Sincerely,



Mark Uppendahl
Colorado Division of Wildlife
Instream Flow Program Coordinator

Cc: Jay Skinner, CDOW Water Unit Program Manager - w/o attachments
Sherman Hebern, CDOW Senior Fish Biologist - West Regions - w/o attachments
Bill Atkinson, CDOW Aquatic Biologist - w/o attachments
Lori Martin, CDOW Aquatic Biologist - w/o attachments
Susan Werner, CDOW AWM Area 10 - w/o attachments

APPENDIX – B
Field Data

10-1/2
0-1-2/23

COLORADO WATER CONSERVATION BOARD
INSTREAM FLOW / NATURAL LAKE LEVEL PROGRAM
STREAM CROSS-SECTION AND FLOW ANALYSIS

LOCATION INFORMATION

STREAM NAME Armstrong Creek
XS LOCATION N 40 44' 34.8" W 107 08' 05.4"
XS NUMBER 7260502

DATE 26-Jul-05
OBSERVERS Uppendahl, Dilger

1/4 SEC NE
SECTION 15
TWP 9
RANGE 87W
PM 6

COUNTY Routt
WATERSHED Yampa
DIVISION 6
DOW CODE 0 ROSE

USGS MAP Quaker Mnt
USFS MAP 0

SUPPLEMENTAL DATA

*** NOTE ***

Leave TAPE WT and TENSION
at defaults for data collected
with a survey level and rod

TAPE WT 0 0106
TENSION 99999

CHANNEL PROFILE DATA

SLOPE 0 02421053

INPUT DATA CHECKED BY DATE

ASSIGNED TO DATE

STREAM NAME Armstrong Creek
 XS LOCATION N 40 44' 34 8" W 107 08' 05 4"
 XS NUMBER 7260502

DATA POINTS=

25

VALUES COMPUTED FROM RAW FIELD DATA

FEATURE	DIST	VERT DEPTH	WATER DEPTH	VEL	WETTED PERIM	WATER DEPTH	AREA (Am)	Q (Qm)	% Q CELL
S	0 00	5 60			0 00		0 00	0 00	0 0%
	2 00	5 90			0 00		0 00	0 00	0 0%
B	2 60	5 99			0 00		0 00	0 00	0 0%
	3 00	6 30			0 00		0 00	0 00	0 0%
	5 00	6 40			0 00		0 00	0 00	0 0%
1 G	6 80	6 65			0 00		0 00	0 00	0 0%
	7 60	6 90			0 00		0 00	0 00	0 0%
W	7 80	7 05	0 00	0 00	0 00		0 00	0 00	0 0%
	7 90	7 25	0 20	0 10	0 22	0 20	0 04	0 00	1 0%
	8 20	7 35	0 30	0 89	0 32	0 30	0 09	0 08	19 1%
	8 50	7 30	0 30	0 94	0 30	0 30	0 09	0 08	20 2%
	8 80	7 25	0 20	0 78	0 30	0 20	0 06	0 05	11 2%
	9 10	7 20	0 20	1 21	0 30	0 20	0 06	0 07	17 3%
	9 40	7 25	0 25	1 38	0 30	0 25	0 09	0 10	24 7%
	9 70	7 20	0 20	0 30	0 30	0 20	0 06	0 02	4 3%
	10 00	7 20	0 20	0 15	0 30	0 20	0 06	0 01	2 2%
	10 30	7 15	0 10	0 00	0 30	0 10	0 03	0 00	0 0%
W	10 60	7 00	0 00	0 00	0 34		0 00	0 00	0 0%
1 G	11 00	6 65			0 00		0 00	0 00	0 0%
	11 50	6 35			0 00		0 00	0 00	0 0%
	13 00	6 25			0 00		0 00	0 00	0 0%
	14 00	6 15			0 00		0 00	0 00	0 0%
B	15 00	5 95			0 00		0 00	0 00	0 0%
S	16 70	5 70			0 00		0 00	0 00	0 0%
TS	16 71	4 80			0 00		0 00	0 00	0 0%

TOTALS -----

3 00 0 3 0 57 0 42 100 0%
 (Max)

Manning's n = 0 1025
 Hydraulic Radius= 0 188328718

STREAM NAME Armstrong Creek
 XS LOCATION N 40 44' 34 8" W 107 08' 05 4"
 XS NUMBER 7260502

WATER LINE COMPARISON TABLE

WATER LINE	MEAS AREA	COMP AREA	AREA ERROR
	0.57	0.55	-2.0%
6.78	0.57	1.35	138.3%
6.80	0.57	1.27	125.5%
6.82	0.57	1.20	113.0%
6.84	0.57	1.13	100.9%
6.86	0.57	1.07	89.0%
6.88	0.57	1.00	77.4%
6.90	0.57	0.94	68.2%
6.92	0.57	0.88	55.2%
6.94	0.57	0.82	44.4%
6.96	0.57	0.76	33.7%
6.98	0.57	0.70	23.3%
6.99	0.57	0.67	18.1%
7.00	0.57	0.64	13.0%
7.01	0.57	0.61	7.9%
7.02	0.57	0.58	2.9%
7.03	0.57	0.55	-2.0%
7.04	0.57	0.53	-6.9%
7.05	0.57	0.50	-11.8%
7.06	0.57	0.47	-16.5%
7.07	0.57	0.44	-21.3%
7.08	0.57	0.42	-26.0%
7.10	0.57	0.37	-35.2%
7.12	0.57	0.31	-44.3%
7.14	0.57	0.26	-53.2%
7.16	0.57	0.22	-61.9%
7.18	0.57	0.17	-70.2%
7.20	0.57	0.12	-78.1%
7.22	0.57	0.09	-84.5%
7.24	0.57	0.06	-89.3%
7.26	0.57	0.04	-92.8%
7.28	0.57	0.03	-95.5%

WATERLINE AT ZERO
 AREA ERROR = 7.021

STREAM NAME Armstrong Creek
 XS LOCATION N 40 44' 34 8" W 107 08' 05 4"
 XS NUMBER 7260502

Constant Manning's n

STAGING TABLE
 GL = lowest Grassline elevation corrected for sag
 WL = Waterline corrected for variations in field measured water surface elevations and sag

	DIST TO WATER (FT)	TOP WIDTH (FT)	AVG DEPTH (FT)	MAX DEPTH (FT)	AREA (SQ FT)	WETTED PERIM (FT)	PERCENT WET PERIM (%)	HYDR RADIUS (FT)	FLOW (CFS)	AVG VELOCITY (FT/SEC)
GL	6 65	4 20	0 44	0 70	1 84	4 62	100 0%	0 40	2 24	1 22
	6 67	4 11	0 43	0 68	1 75	4 52	97 8%	0 39	2 10	1 20
	6 72	3 89	0 40	0 63	1 55	4 27	92 5%	0 36	1 78	1 15
	6 77	3 67	0 37	0 58	1 36	4 03	87 3%	0 34	1 49	1 09
	6 82	3 46	0 34	0 53	1 18	3 79	82 0%	0 31	1 23	1 04
	6 87	3 24	0 31	0 48	1 02	3 54	76 7%	0 29	1 00	0 98
	6 92	3 06	0 28	0 43	0 86	3 34	72 2%	0 26	0 78	0 91
	6 97	2 94	0 24	0 38	0 71	3 18	68 8%	0 22	0 59	0 83
WL	7 02	2 80	0 20	0 33	0 56	3 00	65 0%	0 19	0 42	0 74
	7 07	2 65	0 16	0 28	0 43	2 82	61 0%	0 15	0 28	0 64
	7 12	2 52	0 12	0 23	0 30	2 65	57 4%	0 11	0 16	0 53
	7 17	2 31	0 08	0 18	0 18	2 40	52 0%	0 07	0 07	0 40
	7 22	1 44	0 05	0 13	0 08	1 49	32 2%	0 05	0 03	0 32
	7 27	0 71	0 04	0 06	0 03	0 73	15 8%	0 04	0 01	0 26
	7 32	0 26	0 01	0 03	0 00	0 27	5 8%	0 01	0 00	0 13

$$3/30 = 1.0$$

$$2/30 = 0.10$$

STREAM NAME	Armstrong Creek
XS LOCATION	N 40 44' 34 8" W 107 08' 05 4"
XS NUMBER	7260502

SUMMARY SHEET

MEASURED FLOW (Qm)=	0.42 cfs
CALCULATED FLOW (Qc)=	0.42 cfs
(Qm-Qc)/Qm * 100 =	0.1 %

MEASURED WATERLINE (Wlm)=	7.03 ft
CALCULATED WATERLINE (Wlc)=	7.02 ft
(Wlm-Wlc)/Wlm * 100 =	0.1 %

MAX MEASURED DEPTH (Dm)=	0.30 ft
MAX CALCULATED DEPTH (Dc)=	0.33 ft
(Dm-Dc)/Dm * 100 =	-9.7 %

MEAN VELOCITY=	0.74 ft/sec
MANNING'S N=	0.103
SLOPE=	0.02421053 ft/ft

4 * Qm =	0.2 cfs
2.5 * Qm =	1.0 cfs

RECOMMENDED INSTREAM FLOW

=====

FLOW (CFS)	PERIOD
=====	=====

RATIONALE FOR RECOMMENDATION

=====

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

RECOMMENDATION BY

AGENCY

DATE

CWCB REVIEW BY

DATE

```

STREAM NAME |Armstrong Creek
XS LOCATION |N 40 44' 34 8" W 107 08' 05 4"
XS NUMBER   |7260502
DATE        |7/26/2005
OBSERVERS   |Uppendahl,Dilger

1/4 SEC     |NE
SECTION     |15
TWP         |9
RANGE       |87W
PM          |6

COUNTY     |Routt
WATERSHED   |Yampa
DIVISION     |6
DOW CODE    |
USGS MAP     |Quaker Mnt
USFS MAP     |

```

SLOPE | 0 024210526|ft / ft

ASSIGNED TO	DATE
-------------	------

GL=1	FEATURE	DIST	VERT DEPTH	WATER DEPTH	VEL	A	Q	Tape to Water
			Total Data Points = 25					
	S	0 00	5 60			0 00	0 00	0 00
		2 00	5 90			0 00	0 00	0 00
	B	2 60	5 99			0 00	0 00	0 00
		3 00	6 30			0 00	0 00	0 00
		5 00	6 40			0 00	0 00	0 00
1	G	6 80	6 65			0 00	0 00	0 00
		7 60	6 90			0 00	0 00	0 00
	W	7 80	7 05	0 00	0 00	0 00	0 00	0 00
		7 90	7 25	0 20	0 10	0 04	0 00	7 05
		8 20	7 35	0 30	0 89	0 09	0 08	7 05
		8 50	7 30	0 30	0 94	0 09	0 08	7 00
		8 80	7 25	0 20	0 78	0 06	0 05	7 05
		9 10	7 20	0 20	1 21	0 06	0 07	7 00
		9 40	7 25	0 25	1 38	0 08	0 10	7 00
		9 70	7 20	0 20	0 30	0 06	0 02	7 00
		10 00	7 20	0 20	0 15	0 06	0 01	7 00
		10 30	7 15	0 10	0 00	0 03	0 00	7 05
1	W	10 60	7 00	0 00	0 00	0 00	0 00	0 00
	G	11 00	6 65			0 00	0 00	0 00
		11 50	6 35			0 00	0 00	0 00
		13 00	6 25			0 00	0 00	0 00
		14 00	6 15			0 00	0 00	0 00
	B	15 00	5 95			0 00	0 00	0 00
	S	16 70	5 70			0 00	0 00	0 00
	TS	16 71	4 80			0 00	0 00	0 00

Totals	0.57	0.42
--------	------	------

STREAM NAME Armstrong Creek
 XS LOCATION N 40 44' 34 8" W 107 08' 05 4"
 XS NUMBER 7260502

Thorne-Zevenbergen D84 Correction Applied

Estimated D84 = 0.42

GL = lowest Grassline elevation corrected for sag

WL = Waterline corrected for variations in field measured water surface elevations and sag

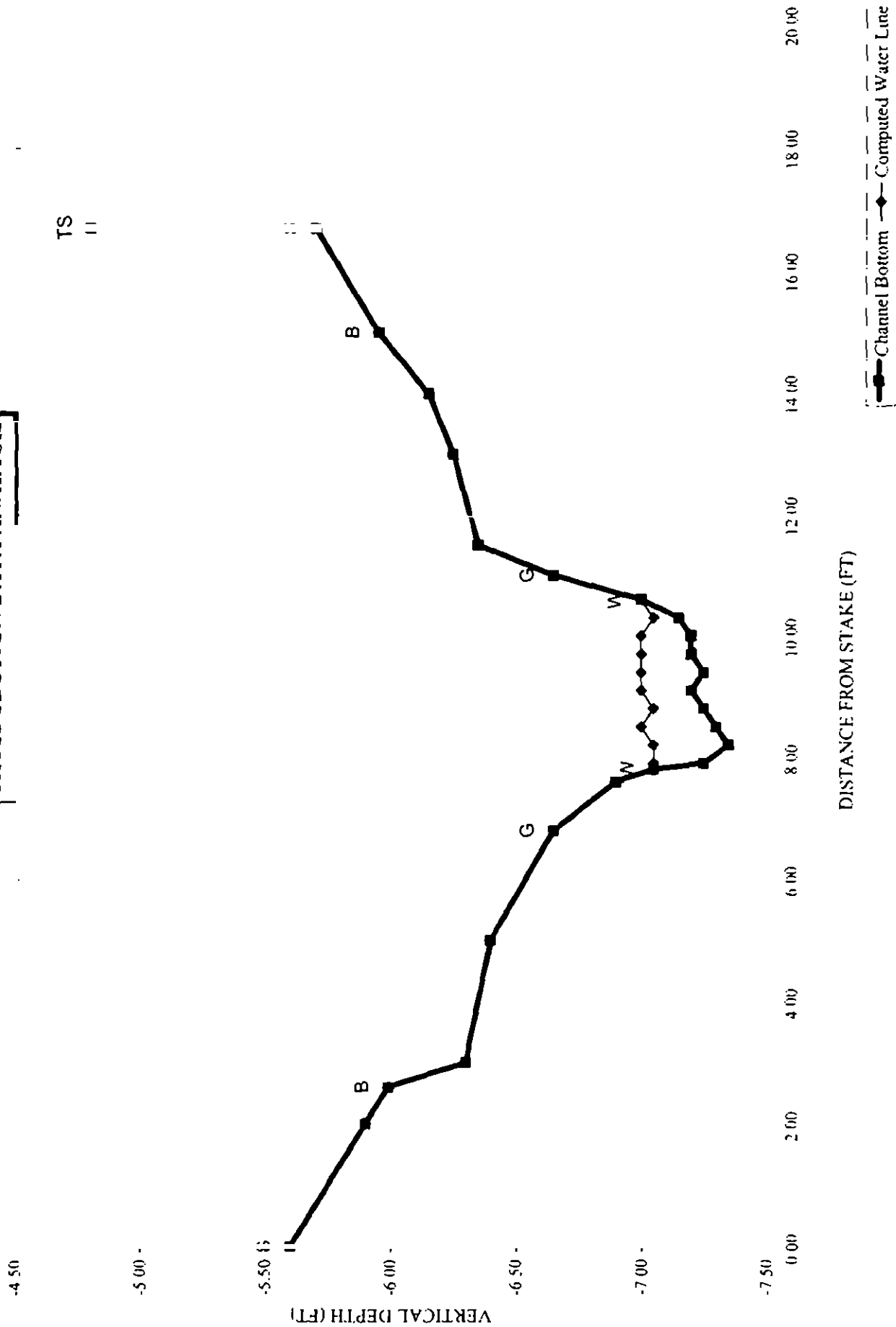
STAGING TABLE

Velocity based on test of R/D84>1

	DIST TO WATER (FT)	TOP WIDTH (FT)	AVG DEPTH (FT)	MAX DEPTH (FT)	AREA (SQ FT)	WETTED PERIM (FT)	PERCENT WET PERIM (%)	HYDR RADIUS (FT)	FLOW (CFS)	AVG VELOCITY (FT/SEC)
GL	6.65	4.20	0.44	0.70	1.84	4.62	100.0%	0.40	5.47	2.98
	6.67	4.11	0.43	0.68	1.75	4.52	97.8%	0.39	4.96	2.83
	6.72	3.89	0.40	0.63	1.55	4.27	92.5%	0.36	3.87	2.49
	6.77	3.67	0.37	0.58	1.36	4.03	87.3%	0.34	2.96	2.17
	6.82	3.46	0.34	0.53	1.18	3.79	82.0%	0.31	2.22	1.87
	6.87	3.24	0.31	0.48	1.02	3.54	76.7%	0.29	1.62	1.59
	6.92	3.06	0.28	0.43	0.86	3.34	72.2%	0.26	1.11	1.30
	6.97	2.94	0.24	0.38	0.71	3.18	68.8%	0.22	0.71	1.00
WL	7.02	2.80	0.20	0.33	0.56	3.00	65.0%	0.19	0.42	0.74
	7.07	2.65	0.16	0.28	0.43	2.82	61.0%	0.15	0.23	0.53
	7.12	2.52	0.12	0.23	0.30	2.65	57.4%	0.11	0.10	0.34
	7.17	2.31	0.08	0.18	0.18	2.40	52.0%	0.07	0.04	0.21
	7.22	1.44	0.05	0.13	0.08	1.49	32.2%	0.05	0.01	0.12
	7.27	0.71	0.04	0.08	0.03	0.73	15.8%	0.04	0.00	0.06
	7.32	0.26	0.01	0.03	0.00	0.27	5.8%	0.01	0.00	0.01

Armstrong Creek

CROSS SECTION DATA ANALYSIS





FIELD DATA FOR INSTREAM FLOW DETERMINATIONS



COLORADO WATER
CONSERVATION BOARD

LOCATION INFORMATION

STREAM NAME Arroyo Creek #1 CROSS-SECTION NO 0720502
CROSS-SECTION LOCATION 25 Yards S of Road Xing in California Park
Near bench mark Elevation 7912 40° 44' 34.8"
DATE 10/1/08 OBSERVERS Quaker / MT 107° 08' 05.4"
LEGAL DESCRIPTION N E SECTION 15 TOWNSHIP 9 (N/S) RANGE 27 E/W 6 PM
COUNTY Route 4 WATERSHED Yampa WATER DIVISION 6 DOW WATER CODE
MAP(S) USGS Quaker MT

SUPPLEMENTAL DATA

SAG TAPE SECTION SAME AS DISCHARGE SECTION (YES/NO) (YES) METER TYPE FLU METER
METER NUMBER DATE RATED CALIB/SPIN sec TAPE WEIGHT lbs/1001 TAPE TENSION lbs
CHANNEL BED MATERIAL SIZE RANGE PHOTOGRAPHS TAKEN (YES/NO) (YES) NUMBER OF PHOTOGRAPHS 51 52 53
54

CHANNEL PROFILE DATA

STATION	DISTANCE FROM TAPE (ft)	ROD READING (ft)	LEGEND
(X) Tape @ Stake LB	0.0	4.80	
(X) Tape @ Stake RB	0.0	5.60	
(1) WS @ Tape LB/RB	0.0	7.05	
(2) WS Upstream	63	5.60	
(3) WS Downstream	32	7.90	

SLOPE 2.3/95 = 0.0242

LEGEND: Stake (X), Station (1), Photo (1), Direction of Flow (arrow)

AQUATIC SAMPLING SUMMARY

STREAM ELECTROFISHED YES/NO (NO) DISTANCE ELECTROFISHED ft FISH CAUGHT YES/NO WATER CHEMISTRY SAMPLED YES/NO

LENGTH - FREQUENCY DISTRIBUTION BY ONE-INCH SIZE GROUPS (1 0-1 9, 2 0-2 9, ETC)

SPECIES (FILL IN)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	>15	TOTAL

AQUATIC INSECTS IN STREAM SECTION BY COMMON OR SCIENTIFIC ORDER NAME

COMMENTS

Quaker Mt 250+ CRN 1-4"

DISCHARGE/CROSS SECTION NOTES

STREAM NAME

Harrison Creek

CROSS-SECTION NO

07260012

DATE

7/26/05

SHEET 1 OF 1

BEGINNING OF MEASUREMENT

EDGE OF WATER LOOKING DOWNSTREAM
(00 AT STAKE)

(LEFT) RIGHT

Gage Reading

ft

TIME

15 31

Features	Stake Grassline (G) Waterline (W) Rock (R)	Distance From Initial Point (ft)	Width (ft)	Total Vertical Depth From Tape (ft)	Water Depth (ft)	Depth of Observation (ft)	Revolutions	Velocity (ft/sec)			Area (ft ²)	Discharge (cfs)
								Time (sec)	At Point	Mean in Vertical		
S		0		5.60								
		2.0		5.90								
R		2.6		5.99								
		3.0		6.30								
		5.0		6.40								
R		5.8		6.65								
		7.6		6.90								
W		7.8		7.05								
		7.9		7.25	.20							
		8.7		7.35	.30							
		8.5		7.30	.30							
		7.8		7.25	.20							
		9.1		7.20	.20							
		9.4		7.25	.25							
		9.9		7.20	.20							
		10.0		7.20	.20							
		10.3		7.15	.10							
W		10.6		7.00								
R		11.0		6.65								
		11.5		6.35								
		13.0		6.25								
		14.0		6.15								
H		16.0		5.95								
S		16.7		5.70								
R		16.9		4.80								

TOTALS

End of Measurement | Time

Gage Reading

ft

CALCULATIONS PERFORMED BY

CALCULATIONS CHECKED BY

WATERQ	WATERNAME	ATL	COQ	SAMPDATE	SPEC	COMM
19035	ARMSTRONG CREEK	16	C1	6/28/2000	LGS	LONGNOSE SUCKER
19035	ARMSTRONG CREEK	16	C1	6/28/2000	MTS	MOTTLED SCULPIN
19035	ARMSTRONG CREEK	16	C1	6/28/2000	LND	LONGNOSE DACE
19035	ARMSTRONG CREEK	16	C1	6/28/2000	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	8/18/1998	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	8/18/1998	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	8/18/1998	BRK	BROOK TROUT
19035	ARMSTRONG CREEK	16	C1	8/18/1998	BRK	BROOK TROUT
19035	ARMSTRONG CREEK	16	C1	8/17/1998	BRK	BROOK TROUT
19035	ARMSTRONG CREEK	16	C1	8/17/1998	SPD	SPECKLED DACE
19035	ARMSTRONG CREEK	16	C1	8/17/1998	MTS	MOTTLED SCULPIN
19035	ARMSTRONG CREEK	16	C1	8/17/1998	MOS	MOUNTAIN SUCKER
19035	ARMSTRONG CREEK	16	C1	8/17/1998	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	8/17/1998	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	8/17/1998	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	7/25/1997	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	7/25/1997	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	7/25/1997	MOS	MOUNTAIN SUCKER
19035	ARMSTRONG CREEK	16	C1	7/25/1997	WHS	WHITE SUCKER
19035	ARMSTRONG CREEK	16	C1	7/25/1997	WHS	WHITE SUCKER
19035	ARMSTRONG CREEK	16	C1	7/25/1997	MTS	MOTTLED SCULPIN
19035	ARMSTRONG CREEK	16	C1	7/25/1997	SPD	SPECKLED DACE
19035	ARMSTRONG CREEK	16	C1	7/25/1997	MOS	MOUNTAIN SUCKER
19035	ARMSTRONG CREEK	16	C1	7/25/1997	MTS	MOTTLED SCULPIN
19035	ARMSTRONG CREEK	16	C1	7/25/1997	SPD	SPECKLED DACE
19035	ARMSTRONG CREEK	16	C1	7/8/1997	SPD	SPECKLED DACE
19035	ARMSTRONG CREEK	16	C1	7/8/1997	SPD	SPECKLED DACE
19035	ARMSTRONG CREEK	16	C1	7/8/1997	BRK	BROOK TROUT
19035	ARMSTRONG CREEK	16	C1	7/8/1997	MTS	MOTTLED SCULPIN
19035	ARMSTRONG CREEK	16	C1	7/8/1997	MTS	MOTTLED SCULPIN
19035	ARMSTRONG CREEK	16	C1	7/8/1997	WHS	WHITE SUCKER
19035	ARMSTRONG CREEK	16	C1	7/8/1997	MOS	MOUNTAIN SUCKER
19035	ARMSTRONG CREEK	16	C1	7/8/1997	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	7/8/1997	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	7/8/1997	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	8/28/1996	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	9/24/1993	CRN	CO RIVER CUTTHROAT
19035	ARMSTRONG CREEK	16	C1	9/24/1993	MOS	MOUNTAIN SUCKER
19035	ARMSTRONG CREEK	16	C1	9/24/1993	WHS	WHITE SUCKER
19035	ARMSTRONG CREEK	16	C1	9/24/1993	SPD	SPECKLED DACE
19035	ARMSTRONG CREEK	16	C1	9/24/1993	MTS	MOTTLED SCULPIN
19035	ARMSTRONG CREEK	16	C1	8/28/1984	SPD	SPECKLED DACE
19035	ARMSTRONG CREEK	16	C1	8/28/1984	MOS	MOUNTAIN SUCKER
19035	ARMSTRONG CREEK	16	C1	8/28/1984	MTS	MOTTLED SCULPIN
19035	ARMSTRONG CREEK	16	C1	8/14/1976	MTS	MOTTLED SCULPIN
19035	ARMSTRONG CREEK	16	C1	8/14/1976	MOS	MOUNTAIN SUCKER

WATERQ	WATERNAME	ATL	COQ	SAMPDATE	SPEC	COMM
19035	ARMSTRONG CREEK	16	C1	8/14/1976	SPD	SPECKLED DACE
19035	ARMSTRONG CREEK	16	C1	8/14/1976	BRK	BROOK TROUT
19035	ARMSTRONG CREEK	16	C1	8/14/1976	CRN	CO RIVER CUTTHROAT

APPENDIX – C
Water Availability Analysis

Station **ELKHEAD CREEK NEAR CLARK, CO.**
 Parameter **STREAM FLOW CFS**
 Year **1942-1973**
 State **CO**
 County **ROUTT**

ID **09244500**
 Statistic **Mean**
 Latitude **40 43'56**
 Longitude **107 10 08**
 Elevation **7800 00**
 Drainage Area **45 40**

Monthly Statistics

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Ann
# Days	527	481	527	480	496	480	527	527	510	529	510	527	6121
Avg Day	3 19	3 19	4 88	64 38	238 8	82 26	10 74	3 64	3 25	4 45	4 46	3 65	34 37
Max Day	7 20	5 00	21 00	500 0	800 0	418 0	41 00	17 00	29 00	23 00	13 00	8 00	800 0
Min Day	1 80	1 60	2 00	2 40	25 00	5 80	1 00	0 300	0 400	0 700	1 60	1 60	0 300
# Months	17	17	17	16	16	16	17	17	17	17	17	17	16
SDev Month	1 03	0 880	2 07	55 48	73 06	50 91	5 56	1 84	1 61	2 04	1 52	1 30	10 40
Skew Month	0 361	0 275	0 783	0 734	0 041	0 404	0 078	0 348	0 542	0 465	0 486	0 401	-0 301
Min Month	1 60	1 60	2 37	11 47	117 5	24 33	2 84	0 894	1 01	1 73	2 26	1 80	15 20
Max Month	5 08	5 00	8 90	165 2	357 6	170 4	19 81	6 73	6 53	8 14	7 64	6 26	52 92
Exceedences													
1%	6 40	5 00	18 46	400 0	620 2	346 2	34 73	11 73	12 90	11 00	9 98	7 60	432 5
5%	5 13	5 00	10 00	288 0	515 6	220 0	26 00	8 20	8 10	8 85	8 20	6 40	210 0
10%	4 30	4 30	7 66	180 0	459 4	196 0	22 00	6 90	5 70	7 91	7 50	5 00	110 0
20%	4 00	4 00	6 00	100 0	359 6	140 0	17 00	5 10	4 60	6 50	5 60	4 80	23 00
50%	3 20	3 00	3 90	30 00	202 0	57 00	9 15	3 30	2 80	3 80	4 00	3 50	4 30
80%	2 20	2 40	3 00	11 00	114 0	27 00	3 88	1 74	1 40	2 30	2 80	2 20	2 60
90%	1 80	2 20	2 60	5 50	89 60	16 00	2 80	1 00	0 900	2 00	2 40	2 00	2 00
95%	1 80	1 60	2 20	4 00	65 80	12 00	1 90	0 700	0 700	1 90	2 35	1 80	1 70
99%	1 80	1 60	2 05	2 60	42 88	6 40	1 30	0 400	0 610	0 900	2 00	1 80	0 721

ELKHEAD CREEK NEAR CLARK, CO.

ID	State	County	Agency	Hydrount	Elevation (ft)	Drainage Basin	Percent Area
924500	CO	ROUT	USGS	1405001	7,800.00	45.4	3.54
Start Date	End Date	Record	# Obs	Average (cfs)	Max (cfs)	Min (cfs)	
1942	1973	19	6121	34.37	800	0.3	
Daily Mean (cfs)							
January	February	March	April	May	June	July	August
1	32	325	381	1298	1506	1582	2265
2	319	326	384	1434	1786	153	2051
3	316	329	383	1602	2031	1481	1919
4	315	33	381	1683	2084	1392	1819
5	312	326	378	1806	2031	129	1716
6	312	325	376	2023	2108	1211	1555
7	313	322	376	2256	2432	1184	1442
8	312	319	379	2715	2444	1173	1337
9	314	319	384	3169	2416	1082	1293
10	319	316	386	3669	2541	1053	1212
11	322	318	386	3971	2632	1073	1131
12	321	317	389	4426	2716	9881	1071
13	321	319	39	4368	2818	9338	1047
14	321	318	392	4864	2751	8788	1052
15	321	318	393	5605	2793	8613	974
16	322	317	412	6303	2936	7806	932
17	321	316	418	6916	2984	7019	88
18	326	316	425	7431	2956	6506	84
19	328	317	425	8113	3008	575	811
20	326	317	434	9556	2943	5338	926
21	324	317	541	1087	2905	475	865
22	325	315	558	1149	2795	4567	772
23	323	312	568	1216	2498	4235	726
24	32	313	599	1258	2305	4409	686
25	319	317	63	1121	215	3984	674
26	318	319	658	1006	2048	3614	622
27	317	319	7	9756	202	322	581
28	318	318	694	9356	1925	3082	536
29	315	324	724	1003	1862	2728	507
30	31	324	753	1183	1833	2538	527
31	312	319	838	1768	8226	1074	513
Average (cfs)	319	319	488	6438	23879	8226	1074
Max (cfs)	328	33	838	1258	3008	1582	2265
Min (cfs)	31	312	376	1298	1506	2538	507
September	October	November	December				
1	281	379	389				
2	276	37	385				
3	266	386	395				
4	262	378	394				
5	249	393	386				
6	272	459	387				
7	324	479	382				
8	269	445	375				
9	26	414	367				
10	269	418	366				
11	252	421	368				
12	231	407	366				
13	242	432	364				
14	275	465	363				
15	292	457	36				
16	318	468	362				
17	371	433	365				
18	348	442	365				
19	376	454	36				
20	42	442	365				
21	42	452	353				
22	42	444	349				
23	369	463	35				
24	388	441	359				
25	416	436	361				
26	42	45	352				
27	411	575	344				
28	546	534	339				
29	448	513	339				
30	325	445	346				
31	546	575	395				
	231	371	336				

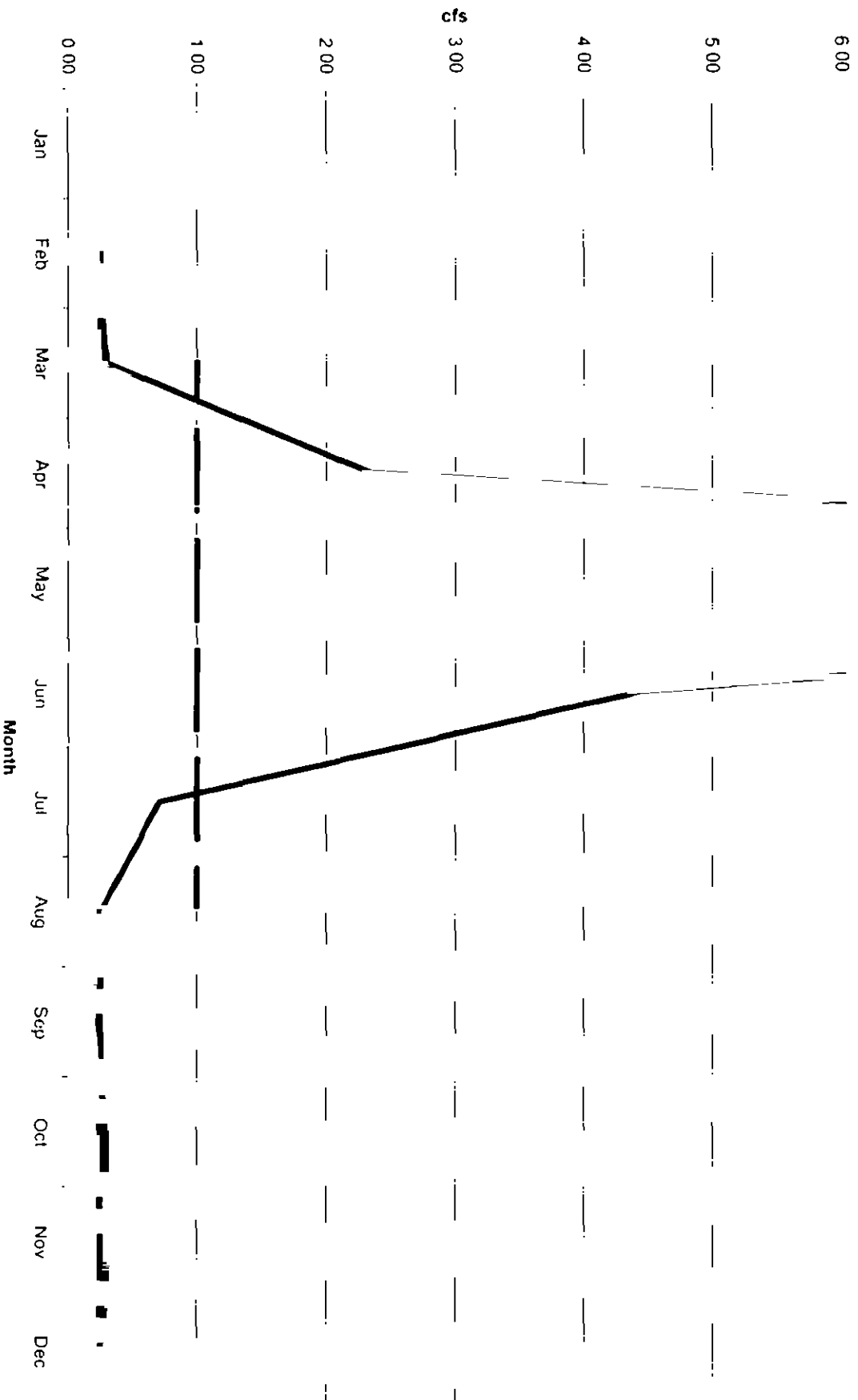
Monthly Stats (cfs)

	January	February	March	April	May	June	July	August	September	October	November	December	Year
# Days	31	28	31	30	31	30	31	31	30	31	30	31	365
Avg Day	3.14	3.19	4.89	64.39	2.88	82.76	107.4	3.64	3.25	4.45	4.46	3.65	34.37
Max Day	7.2	5	2.1	500	300	4.18	4.1	17	29	23	13	8	8
Min Day	1.8	1.6	.21	2.4	2.4	5.8	1	0.3	(14)	0.7	1.6	1.6	0.3
# Months	17	17	17	16	16	16	17	17	17	17	17	17	17
SDev Month	1.03	0.86	2.07	55.48	7.06	50.91	5.56	1.84	1.01	2.04	1.52	1.3	10.4
Skew Month	0.361	-0.276	-0.783	0.734	0.141	0.404	-0.078	0.348	-0.248	0.465	0.486	0.401	-0.301
Min Month	1.8	1.6	2.37	11.47	1.75	24.33	2.84	0.894	1.01	1.73	2.26	1.8	15.2
Max Month	5.08	5	8.9	165.2	32.6	170.4	19.81	6.73	6.53	8.14	7.64	6.26	52.92
Exceedences													
1%	6.4	5	18.46	4100	620.2	346.7	34.73	15.73	12.9	11	9.96	7.6	422.5
5%	5.13	5	10	283	515.6	230	26	8.2	8.1	8.85	8.2	6.4	210
10%	4.3	4.3	7.06	180	429.4	166	22	6.9	5.7	7.91	7.5	5	110
20%	4	4	6	100	351.6	140	17	5.1	4.6	6.5	5.6	4.8	23
50%	3.2	3.4	3.9	30	102	57	9.12	3.3	2.8	3.8	2.8	3.3	4.3
80%	2.2	2.4	3	11	14	27	3.86	1.74	1.4	2.3	2.4	2.2	2.6
90%	1.8	2.2	2.6	5.5	83.6	16	2.6	1	0.9	2	2.4	2	2
95%	1.8	1.6	2.2	4	61.8	1.2	1.0	0.7	0.7	1.9	2.35	1.8	1.7
99%	1.8	1.6	2.05	2.6	42.88	6.4	1.3	0.2	0.61	0.5	2	1.8	0.727

Water Availability for Armstrong Creek Based on Stream Gage: Elkhead Creek NR Clark, CO

Daily Mean (cfs)	January	February	March	April	May	June	July	August	September	October	November	December
Average (cfs)	0.25	0.25	0.38	5.02	18.62	6.41	0.84	0.28	0.25	0.35	0.35	0.28
Max (cfs)	0.26	0.26	0.65	9.81	23.45	12.34	1.77	0.41	0.43	0.45	0.42	0.31
Min (cfs)	0.24	0.24	0.29	1.01	11.74	1.98	0.40	0.20	0.18	0.29	0.31	0.26
Exceedence (cfs)												
1%	0.50	0.39	1.44	31.19	48.36	26.99	2.71	0.91	1.01	0.86	0.78	0.59
5%	0.40	0.39	0.78	22.46	40.20	17.15	2.03	0.64	0.63	0.69	0.64	0.50
10%	0.34	0.34	0.60	14.04	35.82	15.28	1.72	0.54	0.44	0.62	0.58	0.39
20%	0.31	0.31	0.47	7.80	28.04	10.92	1.33	0.40	0.36	0.51	0.44	0.37
50%	0.25	0.23	0.30	2.34	15.75	4.44	0.71	0.26	0.22	0.30	0.31	0.27
80%	0.17	0.19	0.23	0.86	8.89	2.11	0.30	0.14	0.11	0.18	0.22	0.17
90%	0.14	0.17	0.20	0.43	6.99	1.25	0.22	0.08	0.07	0.16	0.19	0.16
95%	0.14	0.12	0.17	0.31	5.13	0.94	0.15	0.05	0.05	0.15	0.18	0.14
99%	0.14	0.12	0.16	0.20	3.34	0.50	0.10	0.03	0.05	0.07	0.16	0.14
	0.25	0.25	1.01	1.01	1.01	1.01	1.01	1.0	0.25	0.25	0.25	0.25

Estimated Stream Flow on Armstrong Creek



Francis Reynolds and Mary Killebrew

$$E_1 = \{(\omega, \omega') \in \Omega \times \Omega : \omega \neq \omega'\}$$
$$\frac{354}{354}$$
$$\begin{array}{r} 334 \\ \underline{234} \\ 100 \end{array}$$

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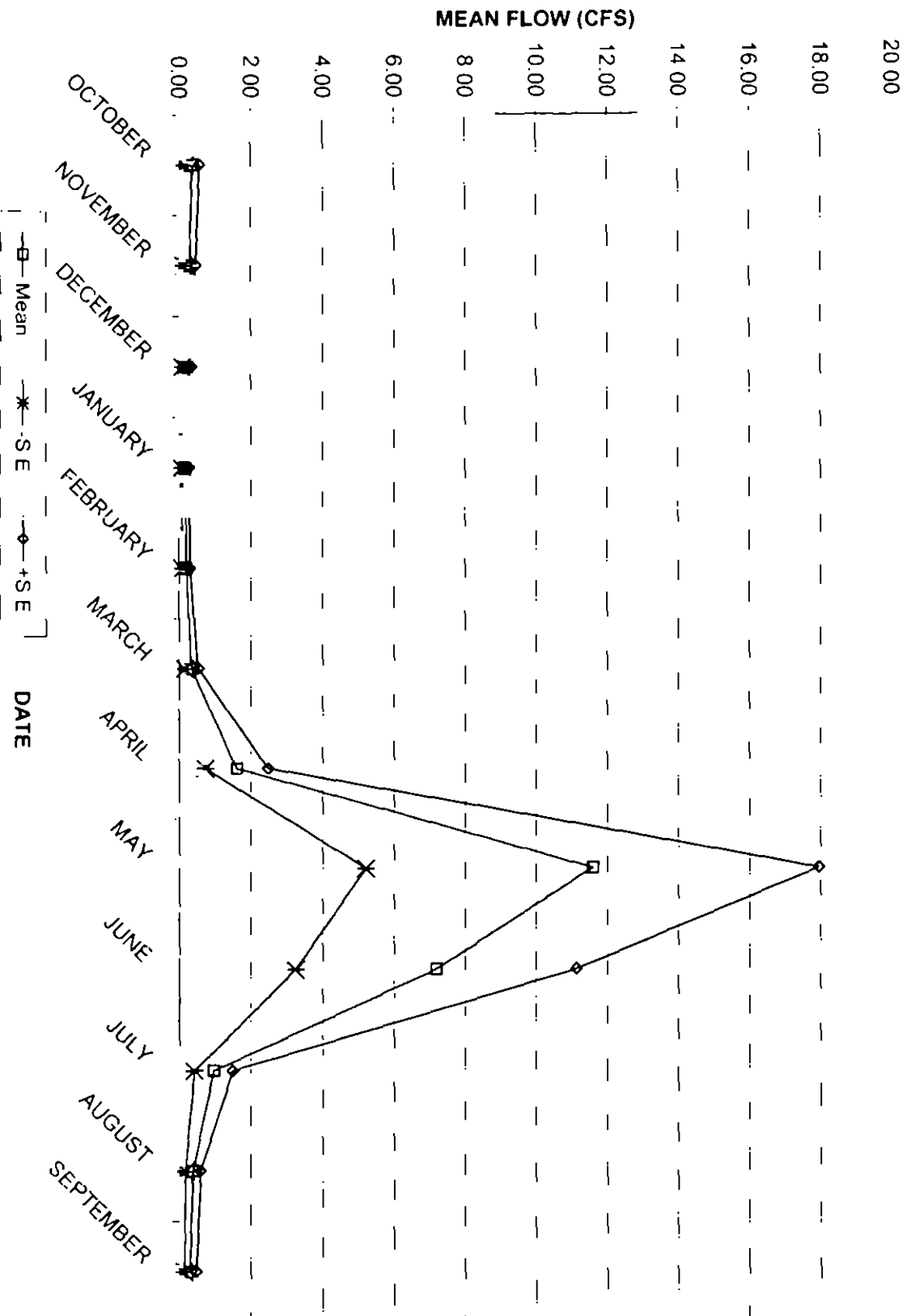
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Armstrong Creek Mean Monthly Flow (CFS)



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Precipitation Data			
Percent of Average			
106%			
104%			
61%			
139%	Year		
73%	1942	73%	
80%	1943	80%	
102%	1944	102%	
157%	1945	157%	
112%	1946	112%	
131%	1947	131%	
117%	1949	117%	
91%	1950	91%	
139%	1951	139%	
92%	1952	92%	
108%	1953	108%	
102%	1954	102%	
90%	1955	90%	
69%	1956	69%	
139%	1957	139%	
56%	1958	56%	
106%	1959	106%	
69%	1960	69%	
94%	1961	94%	
67%	1962	67%	
94%	1963	94%	
110%	1964	110%	
104%	1965	104%	
74%	1966	74%	
125%	1967	125%	
96%	1968	96%	
125%	1969	125%	
120%	1970	120%	
83%	1971	83%	
86%	1972	86%	
94%	1973	94%	
82%	Average	100%	
100%			

APPENDIX – D
Diversion Records

WD	ID	WRNAME	STRTYPE	WRSTRNO	WRSTRNAME	CTY	Q10	Q40	Q160	SEQ	TS	RNG	PM	USETYPE	DCRAMT	DCRUNITS	ADJTYPE	ADJDATE	PADJDATE	APRODATE	ORONO	ADMINNO	PRIORNO	CANO	SEQNO	PLANS	ALTERID	COMMENT
44	841	PITNEY DITCH NO 1	1	38	BRADBURN DRAW	54	NE	NE	12	7 N	89 W	S	1		0.900C		S	05/30/1972	09/01/1960	05/17/1965	0	42140.00000	51	CA2259	1	1	0	
44	1078	HUDACK SPG NO 1	4	112	BROWNS GULCH	41	NE	SW	5	7 N	89 W	S	1890		0.0111C		S	12/31/1974	12/31/1973	06/01/1936	0	45290.31563			1	0	0	
44	1074	HUDACK SPG NO 2	4	112	BROWNS GULCH	41	SW	SW	5	7 N	89 W	S	1890		0.0111C		S	12/31/1974	12/31/1973	07/01/1962	0	45290.31089			1	0	0	
44	2026	MALBURG POND	3	112	BROWNS GULCH	41	NW	NE	9	7 N	89 W	S	19		2.200A		S	12/31/1975	12/31/1974	04/15/1974	0	45655.45359			1	0	0	
44	1083	MALBURG DITCH NO 1	1	112	BROWNS GULCH	41	SE	NW	9	7 N	89 W	S	19		0.600C		S,C	12/31/1975	12/31/1974	09/19/1975	0	45686.00000			1	0	0	
44	1083	MALBURG DITCH NO 1	1	112	BROWNS GULCH	41	SE	NW	9	7 N	89 W	S	19		0.500C		S,CA	12/31/1975	12/31/1974	09/19/1975	0	45686.00000			1	0	0	
44	1084	MALBURG DITCH NO 2	1	112	BROWNS GULCH	41	SE	NW	9	7 N	89 W	S	19		0.700C		S,C	12/31/1975	12/31/1974	09/19/1975	0	45686.00000			1	0	0	
44	1084	MALBURG DITCH NO 2	1	112	BROWNS GULCH	41	SE	NW	9	7 N	89 W	S	19		0.500C		S,C	12/31/1975	12/31/1974	09/19/1975	0	45686.00000			1	0	0	
44	1686	HUDACK SPRING 9	4	112	BROWNS GULCH	41	SE	SW	4	7 N	89 W	S	9W		0.0330C		S	12/31/1999	12/31/1998	06/25/1995	0	54421.53136			1	0	0	
44	1684	HUDACK SPRING 8	4	112	BROWNS GULCH	41	SW	SW	4	7 N	89 W	S	9W		0.0330C		S	12/31/1999	12/31/1998	07/30/1998	0	54421.54267			1	0	0	
44	4711	HUDACK HOMESTEAD RESERVOIR	3	112	BROWNS GULCH	41	NE	SE	5	7 N	89 W	S	9W		0.500A		S	12/31/2002	12/31/2001	06/15/1971	0	55517.44360			1	0	0	
44	6117	MEINHOLD WELL	2	85	BUCK GULCH	54	NW	NE	7	7 N	88 W	S	18		0.0330C		S,TF	05/30/1972	09/01/1960	10/25/1960	0	40475.00000	39		1	0	0	440843
44	842	PITNEY DITCH NO 3	1	85	BUCK GULCH	54	NW	NE	7	7 N	88 W	S	1		1.200C		S	05/30/1972	09/01/1960	10/25/1960	0	40475.00000	39	CA2259	1	0	0	
44	843	PITNEY DITCH NO 3	1	85	BUCK GULCH	54	NW	NE	7	7 N	88 W	S	18		0.0330C		S,TF	05/30/1972	09/01/1960	10/25/1960	0	40475.00000	39		1	0	0	440811
44	6118	PAUL MOORE WELL	2	85	BUCK GULCH	54	SW	NW	1	7 N	88 W	S	89		0.0110C		O	12/31/1980		12/31/1971	0	44559.00000			1	0	0	
44	796	BUCK GULCH DITCH	1	85	BUCK GULCH	54	NW	SW	8	7 N	88 W	S	189		1.000C		S	12/31/1972	12/31/1971	05/01/1935	0	44559.31164			1	0	0	
44	796	BUCK GULCH DITCH	1	85	BUCK GULCH	54	NW	SW	8	7 N	88 W	S	189		1.000C		S,AB	12/31/1972	12/31/1971	05/01/1935	0	44559.31166			1	0	0	
44	1078	ZEHNER SPG SITE C	4	85	BUCK GULCH	54	NW	SW	28	7 N	88 W	S	9		0.040C		S	12/31/1974	12/31/1973	07/01/1960	0	45290.18444			1	0	0	
44	1077	ZEHNER SPG SITE B	4	85	BUCK GULCH	54	NE	SW	28	7 N	88 W	S	9		0.030C		S	12/31/1974	12/31/1973	09/01/1960	0	45290.18506			1	0	0	
44	884	SOUTH SPRING	4	85	BUCK GULCH	54	SE	NE	7	7 N	88 W	S	89		0.0330C		S	12/31/1978	12/31/1977	07/01/1977	0	46751.46568			1	0	0	
44	2040	MIDDLE SPG	4	85	BUCK GULCH	54	NE	NE	7	7 N	88 W	S	89		0.0330C		S,C	12/31/1978	12/31/1977	08/24/1978	0	46987.00000			1	0	0	
44	2040	MIDDLE SPG	4	85	BUCK GULCH	54	NE	NE	7	7 N	88 W	S	89		0.0330C		S,C	12/31/1978	12/31/1977	08/24/1978	0	46987.00000			1	0	0	
44	2047	NORTH SPG	4	85	BUCK GULCH	54	NW	NE	7	7 N	88 W	S	89		0.0330C		S,C	12/31/1978	12/31/1977	08/24/1978	0	46987.00000			1	0	0	
44	2047	NORTH SPG	4	85	BUCK GULCH	54	NW	NE	7	7 N	88 W	S	89		0.0330C		S,C,AB	12/31/1978	12/31/1977	08/24/1978	0	46987.00000			1	0	0	
44	6118	PAUL MOORE WELL	2	85	BUCK GULCH	54	SW	NW	3	7 N	88 W	S	89		0.0220C		O,C	12/31/1980		08/01/1980	0	47636.00000			1	0	0	0
44	6118	PAUL MOORE WELL	2	85	BUCK GULCH	54	SW	NW	3	7 N	88 W	S	89		0.0220C		S,C	12/31/1980		05/07/1980	0	47609.00000			1	0	0	
44	3425	MIDDLE RES	3	85	BUCK GULCH	54	SW	NW	8	7 N	88 W	S	9		5.400A		S	12/31/1982	12/31/1981	08/01/1946	0	48212.35274			1	0	0	
44	2010	HOWE DITCH	1	110	CALF CK	54	NE	NE	15	8 N	88 W	S	1		4.000C		S,TF	12/31/1975	12/31/1974	07/21/1975	0	45657.00000			1	0	0	440070
44	2010	HOWE DITCH	1	110	CALF CK	54	NE	NE	15	8 N	88 W	S	1		4.000C		S	12/31/1975	12/31/1974	07/21/1975	0	45657.00000			1	0	0	
44	2011	HOWE SPG NO 1	4	110	CALF CK	54	NW	NW	15	8 N	88 W	S	9		0.200C		S,C	12/31/1976	12/31/1975	01/21/1976	0	46041.00000			1	0	0	
44	2011	HOWE SPG NO 1	4	110	CALF CK	54	NW	NW	15	8 N	88 W	S	9		0.200C		S,C	12/31/1976	12/31/1975	01/21/1976	0	46041.00000			1	0	0	
44	2012	HOWE SPG NO 2	4	110	CALF CK	54	NE	NW	15	8 N	88 W	S	9		0.200C		S,C	12/31/1976	12/31/1975	01/21/1976	0	46041.00000			1	0	0	
44	2012	HOWE SPG NO 2	4	110	CALF CK	54	NE	NW	15	8 N	88 W	S	9		0.200C		S,C	12/31/1976	12/31/1975	01/21/1976	0	46041.00000			1	0	0	
44	2013	HOWE SPG NO 3	4	110	CALF CK	54	NE	NW	15	8 N	88 W	S	9		0.200C		S,C	12/31/1976	12/31/1975	01/21/1976	0	46041.00000			1	0	0	
44	2013	HOWE SPG NO 3	4	110	CALF CK	54	NE	NW	15	8 N	88 W	S	9		0.200C		S,C	12/31/1976	12/31/1975	01/21/1976	0	46041.00000			1	0	0	
44	2284	HOUSE SPG	4	110	CALF CK	41	NE	SW	20	7 N	89 W	S	8		0.0330C		S	12/31/1980	12/31/1978	06/21/1942	0	47481.37163			1	0	0	
44	2743	RAFTOPOULOS Q MTN RES 1	3	110	CALF CK	54	NE	NW	17	8 N	87 W	S	9		1.000A		S	12/31/1983	12/31/1982	08/15/1967	0	48577.42989			1	0	0	
44	3743	RAFTOPOULOS Q MTN RES 2	3	110	CALF CK	54	SW	SW	6	8 N	87 W	S	9		1.000A		S	12/31/1983	12/31/1982	06/20/1967	0	48577.42904			1	0	0	
44	3744	RAFTOPOULOS Q MTN RES 3	3	110	CALF CK	54	NW	SE	5	8 N	87 W	S	9		1.000A		S	12/31/1983	12/31/1982	06/25/1967	0	48577.42909			1	0	0	
44	3745	RAFTOPOULOS Q MTN RES 4	3	110	CALF CK	54	NE	SW	5	8 N	87 W	S	9		1.000A		S	12/31/1983	12/31/1982	06/30/1967	0	48577.42914			1	0	0	
44	3748	RAFTOPOULOS Q MTN RES 5	3	110	CALF CK	54	NW	NE	6	8 N	87 W	S	9		1.000A		S,C	12/31/1983	12/31/1982	11/16/1983	0	48897.00000			1	0	0	
44	3748	RAFTOPOULOS Q MTN RES 5	3	110	CALF CK	54	NW	NE	6	8 N	87 W	S	9		1.000A		S,C,AB	12/31/1983	12/31/1982	11/16/1983	0	48897.00000			1	0	0	0
44	1267	ROBIN SPRING 1	4	110	CALF CK	54	SW	NW	7	8 N	87 W	S	9		0.0220C		S	12/31/1988	12/31/1987	06/20/1978	0	50403.46922			1	0	0	
44	4186	DOROGY LOWER POND #1	3	110	CALF CK	54	NE	SW	5	8 N	87 W	S	5W		1.000A		S	12/31/1994	12/31/1993	09/30/1991	0	52595.51772			1	0	0	
44	4187	DOROGY LOWER POND #2	3	110	CALF CK	54	NE	SW	5	8 N	87 W	S	5W		0.500A		S	12/31/1994	12/31/1993	09/30/1991	0	52595.51772			1	0	0	
44	5071	BRUCE WELL #3	2	110	CALF CK	54	SE	SE	6	8 N	87 W	S	8		0.0330C		S	12/31/1994	12/31/1993	06/01/1994	0	52747.00000			1	0	0	
44	1838	ASPEN GLEN SPRING	4	110	CALF CK	41	NE	NW	13	8 N	88 W	S	9		0.0330C		S	12/31/1996	12/31/1995	07/01/1974	0	53325.45472			1	0	0	
44	1340	SADOKA SPRING	4	110	CALF CK	41	SW	NW	13	8 N	88 W	S	9		0.0330C		S	12/31/1996	12/31/1995	07/01/1974	0	53325.45472			1	0	0	
44	1341	JONES DRAW SPRING #1	4	110	CALF CK	41	NE	NW	11	8 N	88 W	S	9		0.0330C		S	12/31/1996	12/31/1995	07/01/1974	0	53325.45472			1	0	0	
44	1342	JONES DRAW SPRING #2	4	110	CALF CK	41	SW	NE	11	8 N	88 W	S	9		0.0330C		S	12/31/1996	12/31/1995	07/01/1974	0	53325.45472			1	0	0	
44	2066	CIRCLE CREEK MSP	0	118	CIRCLE CK	54	NE	NE	30	10 N	87 W	S	M		1.000C		S	12/31/1977	12/31/1976	09/23/1977	0	46652.00000			1	0	0	
44	3720	PITNEY RESERVOIR	3	87	CORRAL GULCH	54	NW	NW	7	7 N	88 W	S	1		11.230A		S,C	05/30/1972	09/01/1960	07/06/1964	0	41825.00000	49	CA2259	1	0	0	
44	3720	PITNEY RESERVOIR	3	87	CORRAL GULCH	54	NW	NW	7	7 N	88 W	S	1		11.230A		S,C,AB	05/30/1972	09/01/1960	07/06/1964	0	41825.00000	49	8				

44	2082	HOLLOWAY SPG	4	87	CORRAL GULCH	54	NE	NW	29	7 N	88 W	S	89	0.0450	C	S,CA	12/31/1980	12/31/1979	12/18/1980	0	47834.00000	88CW0043	2		0	
44	2082	HOLLOWAY SPG	4	87	CORRAL GULCH	54	NE	NW	29	7 N	88 W	S	89	0.0450	C	S,C	12/31/1980	12/31/1979	12/18/1980	0	47834.00000	88CW0029	1		0	
44	2124	DAWSON SPRING	4	87	CORRAL GULCH	54	SE	NW	18	7 N	88 W	S	89	0.0050	C	S	12/31/1981	12/31/1980	08/01/1960	0	47847.40390	81CW0094	1		0	
44	2178	CASTER NO 1 SPG	4	87	CORRAL GULCH	54	NW	NE	18	7 N	88 W	S	189	0.0330	C	S	12/31/1981	12/31/1980	05/11/1981	0	47878.00000	81CW0132	1		0	
44	2179	CASTER SP 2	4	87	CORRAL GULCH	54	NW	NE	18	7 N	88 W	S	189	0.0330	C	S	12/31/1981	12/31/1980	05/11/1981	0	47878.00000	81CW0134	1		0	
44	2168	HOCKADAY SPRING	4	87	CORRAL GULCH	54	SE	NW	29	7 N	88 W	S	9	0.0300	C	S	12/31/1981	12/31/1980	08/21/1981	0	48103.00000	81CW0093	1		0	
44	1268	HOCKADAY SPRING 2	4	87	CORRAL GULCH	54	SW	NE	12	7 N	88 W	S	9	0.0300	C	S	12/31/1988	12/31/1987	06/01/1988	0	50556.00000	88CW0098	1		0	
44	4033	CATTAIL POND	3	87	CORRAL GULCH	54	SW	SW	29	7 N	88 W	S	19	3.0000	A	S	12/31/1990	12/31/1989	04/01/1952	0	51134.37344	90CW0079	1		0	
44	1336	HOCKADAY SPRING NO 3	4	87	CORRAL GULCH	54	NE	SW	29	7 N	88 W	S	9	0.0330	C	S	12/31/1990	12/31/1989	04/02/1990	0	51226.00000	90CW0038	1		0	
44	1360	DITTO SPRING	4	87	CORRAL GULCH	54	NE	NW	29	7 N	88 W	S	9	0.0070	C	S	12/31/1990	12/31/1989	10/19/1990	0	51426.00000	90CW0136	1		0	
44	1369	HAYES SPRING	4	87	CORRAL GULCH	54	NW	NW	32	7 N	88 W	S	9	0.0330	C	S	12/31/1991	12/31/1990	10/31/1989	0	51499.51073	91CW0042	1		0	
44	1582	PITNEY SPRING # 1	4	87	CORRAL GULCH	54	NW	SE	18	7 N	88 W	S	19	0.0111	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1583	PITNEY SPRING # 2	4	87	CORRAL GULCH	54	NE	SW	18	7 N	88 W	S	19	0.0222	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1584	PITNEY SPRING # 3	4	87	CORRAL GULCH	54	NE	SW	18	7 N	88 W	S	19	0.0222	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1585	PITNEY SPRING # 4	4	87	CORRAL GULCH	54	NE	SW	18	7 N	88 W	S	19	0.0222	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1586	PITNEY SPRING # 5	4	87	CORRAL GULCH	54	SE	NW	18	7 N	88 W	S	19	0.0222	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1587	PITNEY SPRING # 6	4	87	CORRAL GULCH	54	SE	NW	18	7 N	88 W	S	19	0.0222	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1588	PITNEY SPRING # 7	4	87	CORRAL GULCH	54	SE	NW	18	7 N	88 W	S	19	0.0222	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1589	PITNEY SPRING # 8	4	87	CORRAL GULCH	54	SE	NW	18	7 N	88 W	S	19	0.0222	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1590	PITNEY SPRING # 9	4	87	CORRAL GULCH	54	SE	NW	18	7 N	88 W	S	19	0.0222	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1591	PITNEY SPRING #10	4	87	CORRAL GULCH	54	SE	NW	18	7 N	88 W	S	19	0.0222	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1592	PITNEY SPRING #11	4	87	CORRAL GULCH	54	SE	NW	18	7 N	88 W	S	19	0.0222	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1593	PITNEY SPRING #12	4	87	CORRAL GULCH	54	NW	NW	18	7 N	88 W	S	19	0.0022	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1594	PITNEY SPRING #13	4	87	CORRAL GULCH	54	NW	NW	18	7 N	88 W	S	19	0.0022	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1595	PITNEY SPRING #14	4	87	CORRAL GULCH	54	NW	NW	18	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1596	PITNEY SPRING #15	4	87	CORRAL GULCH	54	NW	NW	18	7 N	88 W	S	19	0.0111	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1597	PITNEY SPRING #16	4	87	CORRAL GULCH	54	NW	NW	18	7 N	88 W	S	19	0.0022	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1598	PITNEY SPRING #17	4	87	CORRAL GULCH	54	NW	NW	18	7 N	88 W	S	19	0.0022	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1599	PITNEY SPRING #18	4	87	CORRAL GULCH	54	SW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1600	PITNEY SPRING #19	4	87	CORRAL GULCH	54	SW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1601	PITNEY SPRING #20	4	87	CORRAL GULCH	54	SW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1602	PITNEY SPRING #21	4	87	CORRAL GULCH	54	SW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1603	PITNEY SPRING #22	4	87	CORRAL GULCH	54	SW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1604	PITNEY SPRING #23	4	87	CORRAL GULCH	54	SW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1605	PITNEY SPRING #24	4	87	CORRAL GULCH	54	SW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1606	PITNEY SPRING #25	4	87	CORRAL GULCH	54	SW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1607	PITNEY SPRING #26	4	87	CORRAL GULCH	54	NW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1608	PITNEY SPRING #27	4	87	CORRAL GULCH	54	NW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1609	PITNEY SPRING #28	4	87	CORRAL GULCH	54	NW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1610	PITNEY SPRING #29	4	87	CORRAL GULCH	54	NW	SW	7	7 N	88 W	S	19	0.0044	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1611	PITNEY SPRING #30	4	87	CORRAL GULCH	54	SE	SE	12	7 N	88 W	S	19	0.0022	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1612	PITNEY SPRING #31	4	87	CORRAL GULCH	54	SE	NW	7	7 N	88 W	S	9	0.0022	C	S	12/31/1994	12/31/1993	06/20/1966	0	52595.42539	94CW0083	1		0	
44	1733	REEDY SPRING	4	87	CORRAL GULCH	54	SE	NW	29	7 N	88 W	S	9	0.0100	C	S	12/31/1995	12/31/1994	11/23/1995	0	53287.00000	96CW0001	1		0	
44	4498	SIMPSON POND	3	87	CORRAL GULCH	54	NE	SW	29	7 N	88 W	S	1	1.0000	A	S	12/31/1999	12/31/1998	09/15/1994	0	54421.52822	99CW0012	1		0	
44	4628	MORGAN CK FEEDER D 1	1	132	COTTONWOOD GULCH	54	SE	SE	28	8 N	87 W	S	1	0.5000	C	S	06/23/1914	06/19/1914	10/14/1908	0	23545.21471	83AA	1		0	
44	1323	KAWCACK SPRING 1	4	132	COTTONWOOD GULCH	41	SE	NE	21	8 N	89 W	S	8	0.0022	C	S,C	12/31/1980	12/31/1989	05/10/1989	0	51134.50889	90CW0002	2		0	
44	1323	KAWCACK SPRING 1	4	132	COTTONWOOD GULCH	41	SE	NE	21	8 N	89 W	S	9	0.0022	C	S	12/31/1990	12/31/1989	05/10/1989	0	51134.50889	90CW0002	1		0	
44	725	OLDHAM D NO 2	1	77	DRY FORK	54	NE	SW	19	8 N	87 W	S	1	2.0000	C	S	09/24/1904	09/19/1904	06/07/1901	0	19885.18785	67A	1		0	
44	717	MURPHY DITCH NO 1	1	77	DRY FORK	54	SE	NW	35	8 N	88 W	S	1	0.5000	C	S	06/22/1909	10/08/1908	08/10/1902	0	21465.19214	73-3A	1		0	
44	717	MURPHY DITCH NO 1	1	77	DRY FORK	54	SE	NW	35	8 N	88 W	S	1	0.5000	C	S,AB	06/22/1909	10/08/1908	08/10/1902	0	21465.19214	73-3A	81CW0116	3		0
44	718	MURPHY DITCH NO 2	1	77	DRY FORK	54	SW	SW	35	8 N	88 W	S	1	2.6600	C	S	06/22/1909	10/08/1908	08/10/1902	0	21465.19214	73-4A	1		0	
44	718	MURPHY DITCH NO 2	1	77	DRY FORK	54	SW	SW	35	8 N	88 W	S	1	0.5200	C	S,C	06/22/1909	10/08/1908	08/10/1902	0	21465.19214	73-4A	1		0	
44	718	MURPHY DITCH NO 2	1	77	DRY FORK	54	SW	SW	35	8 N	88 W	S	1	2.6600	C	S,AB	06/22/1909	10/08/1908	08/10/1902	0	21465.19214	73-4A	81CW0116	3		0
44	718	MURPHY DITCH NO 2	1	77	DRY FORK	54	SW	SW	35	8 N	88 W	S	1	0.5200	C	S,C,AB	06/22/1909	10/08/1908	08/10/1902	0	21465.19214	73-4A	84CW0071	4		0
44	649	HERBERT L FRANK D	1	77	DRY FORK	54	NW	SW	33	8 N	88 W	S	1	0.8300	C	S	09/23/1911	08/21/1911	07/19/1905	0	22503.20279	79-5A	1		0	
44	624	FULTON																								

44	799	CARNS SPG NO 1	4	77	DRY FORK	54	SW	NW	4	7	N	88	W	S	18	0.0040	C	S	12/31/1972	12/31/1971	06/01/1948	0	44559.35948		W0184-72	1		0		
44	1033	CARNS SPG NO 2	4	77	DRY FORK	54	SW	NW	4	7	N	88	W	S	189	0.0030	C	S	12/31/1972	12/31/1971	06/01/1948	0	44559.35948		W0184-72	1		0		
44	1022	FULTON SPG NO 3	4	77	DRY FORK	54	SE	NE	13	8	N	88	W	S	19	0.0100	C	S	12/31/1973	12/31/1972	03/10/1948	0	44925.35863		W0452-73	1		0		
44	1021	FULTON SPG NO 4	4	77	DRY FORK	54	SW	SE	13	8	N	88	W	S	89	0.0100	C	S	12/31/1973	12/31/1972	03/10/1948	0	44925.35863		W0451-73	1		0		
44	1023	FULTON SPG NO 7	4	77	DRY FORK	54	SE	SW	7	8	N	87	W	S	9	0.0100	C	S	12/31/1973	12/31/1972	06/15/1948	0	44925.35968		W0448-73	1		0		
44	1034	FULTON SPG NO 6	4	77	DRY FORK	54	SE	NW	13	8	N	88	W	S	9	0.0100	C	S	12/31/1973	12/31/1972	07/01/1969	0	44925.35968		W0447-73	1		0		
44	1034	FULTON SPG NO 6	4	77	DRY FORK	54	SE	NW	13	8	N	88	W	S	9	0.0100	C	S,CAB	12/31/1973	12/31/1972	07/01/1969	0	44925.35968		W0448-73	3	0	ABAN 10/14/80		
44	1026	FULTON SPG NO 2	4	77	DRY FORK	54	SW	NW	18	8	N	87	W	S	9	0.0100	C	S,C	12/31/1973	12/31/1972	01/15/1962	0	44925.40922		W0453-73	1		0		
44	1026	FULTON SPG NO 2	4	77	DRY FORK	54	SW	NW	18	8	N	87	W	S	9	0.0100	C	S,CAB	12/31/1973	12/31/1972	01/15/1962	0	44925.40922		W0453-73	3	0	ABAN 10/14/80		
44	1027	FULTON SPG NO 5	4	77	DRY FORK	54	NE	SW	13	8	N	88	W	S	9	0.0100	C	S,C	12/31/1973	12/31/1972	06/01/1963	0	44925.41424		W0450-73	1		0		
44	1027	FULTON SPG NO 5	4	77	DRY FORK	54	NE	SW	13	8	N	88	W	S	9	0.0100	C	S,CAB	12/31/1973	12/31/1972	06/01/1963	0	44925.41424		W0450-73	3	0	ABAN 10/14/80		
44	848	WOODLEY SPG. #1	4	77	DRY FORK	54	NW	SW	36	8	N	88	W	S	89	0.0330	C	S	12/31/1979	12/31/1978	07/10/1977	0	47116.46577		79CW0032	1		0		
44	847	WOODLEY SPG. #1	4	77	DRY FORK	54	NW	SW	36	8	N	88	W	S	89	0.0330	C	S	12/31/1979	12/31/1978	07/17/1977	0	47116.46584		79CW0032	1		0		
44	1024	FULTON SPG NO 6	4	77	DRY FORK	54	SE	NW	13	8	N	88	W	S	9	0.0100	C	S	12/31/1981	12/31/1980	07/01/1959	0	47847.39993		81CW0289	2		0		
44	1025	FULTON SPG NO 1	4	77	DRY FORK	54	NW	NW	18	8	N	87	W	S	9	0.0100	C	S,C	12/31/1981	12/31/1980	01/15/1962	0	47847.40922		81CW0289	1		0		
44	1025	FULTON SPG NO 1	4	77	DRY FORK	54	NW	NW	18	8	N	87	W	S	9	0.0100	C	S	12/31/1981	12/31/1980	01/15/1962	0	47847.40922		81CW0289	2		0		
44	1026	FULTON SPG NO 2	4	77	DRY FORK	54	SW	NW	18	8	N	87	W	S	9	0.0100	C	S	12/31/1981	12/31/1980	01/15/1962	0	47847.40922		81CW0289	2		0		
44	1027	FULTON SPG NO 5	4	77	DRY FORK	54	NE	SW	13	8	N	88	W	S	9	0.0100	C	S	12/31/1981	12/31/1980	06/01/1963	0	47847.41424		81CW0289	2		0		
44	3715	SMITH RANCHO S T L R 5	3	77	DRY FORK	54	SE	NE	16	8	N	87	W	S	9	1.0000	A	S	12/31/1983	12/31/1982	09/15/1950	0	48577.36782		83CW0159	1		0		
44	3748	RAFAPOULOS Q M N RES 6	3	77	DRY FORK	54	SW	SW	8	8	N	87	W	S	9	0.0200	A	S,C	12/31/1983	12/31/1982	11/16/1983	0	48897.00000		83CW0175	1		0		
44	3749	RAFAPOULOS Q M N RES 6	3	77	DRY FORK	54	SW	SW	8	8	N	87	W	S	9	0.0200	A	S,CAB	12/31/1983	12/31/1982	11/16/1983	0	48897.00000		83CW0175	2	0	ABANDONED .02 CFS 12/31/1988		
44	724	NORVELL DITCH	1	9	ELKHEAD CK	41	SE	NE	25	7	N	90	W	S	1	10.0000	C	O	09/22/1892		05/14/1885	0	12918.00000	12	1		0			
44	763	SMITH DITCH	1	9	ELKHEAD CK	54	NW	NW	28	7	N	89	W	S	1	5.4600	C	O	09/22/1892		12/06/1886	0	13489.00000	16	1		0			
44	763	SMITH DITCH	1	9	ELKHEAD CK	54	NW	NW	28	7	N	89	W	S	1	2.2000	C	O	09/22/1892		03/26/1888	0	13965.00000	22	2		0			
44	699	MCKINLAY DITCH NO 1	1	9	ELKHEAD CK	54	SE	SE	7	8	N	88	W	S	1	8.3300	C	O	09/22/1892		05/01/1890	0	14731.00000	50	1		0			
44	700	MCKINLAY DITCH NO 2	1	9	ELKHEAD CK	54	NE	SE	17	8	N	88	W	S	1	11.6600	C	O	09/22/1892		05/01/1890	0	14731.00000	51	1		0			
44	1188	STARR IRR DITCH ALT PT	1	9	ELKHEAD CK	41	SE	NW	21	7	N	89	W	S	1	0.9000	C	S,T	09/26/1905	09/19/1905	06/22/1900	0	20350.18435	A4A4	83CW0039	1	4403770	TF STARR IRR DITCH		
44	778	STARR IRRIG DITCH	1	9	ELKHEAD CK	41	NE	SE	16	7	N	89	W	S	1	6.1000	C	S	09/26/1905	09/19/1905	06/22/1900	0	20350.18435	A4A4		1	0	0 CFS POINT OF DIVERSION. 9 CFS 83CW39.		
44	778	STARR IRRIG DITCH	1	9	ELKHEAD CK	41	NE	SE	16	7	N	89	W	S	1	0.9000	C	S,TF	09/26/1905	09/19/1905	06/22/1900	0	20350.18435	A4A4	83CW0039	4	4403188	TF STARR IRR DITCH ALT PT		
44	536	ARMSTRONG IRR DITCH	1	9	ELKHEAD CK	54	NE	SW	10	9	N	87	W	S	1	1.2500	C	S	06/04/1907	09/20/1906	07/15/1902	0	20716.19188	73A4		1	0			
44	536	ARMSTRONG IRR DITCH	1	9	ELKHEAD CK	54	NE	SW	10	9	N	87	W	S	1	1.2500	C	S,AB	06/04/1907	09/20/1906	07/15/1902	0	20716.19188	73A4	81CW0116	2		0		
44	4723	PARK RESERVOIR	3	9	ELKHEAD CK	54					9	N	87	W	S	1	34666.0000	A	S,C	06/15/1911	06/14/1911	10/27/1904	0	22444.20223	79 34	CA0663	1	0	0 PART OF GREAT NORTHERN PROJECT	
44	4724	KILPATRICK IRRIGATION RESERVOIR	3	9	ELKHEAD CK	54					3	9	N	88	W	S	1	7886.0000	A	S,C	06/15/1911	06/14/1911	06/14/1905	0	22444.20223	79 12	CA0663	1	0	0 PART OF GREAT NORTHERN PROJECT
44	4723	PARK RESERVOIR	3	9	ELKHEAD CK	54					9	N	87	W	S	1	13535.0000	A	S,C	06/15/1911	06/14/1911	06/14/1909	0	22444.21714	85	CA0663	2	0	0 PART OF GREAT NORTHERN PROJECT	
44	595	DIAMOND DITCH	1	9	ELKHEAD CK	54	NE	NE	2	7	N	89	W	S	1	0.5000	C	S	09/23/1911	08/12/1911	11/15/1903	0	22503.19676	78A		1	0			
44	595	DIAMOND DITCH	1	9	ELKHEAD CK	54	NE	NE	2	7	N	89	W	S	1	11.7000	C	S,C	09/23/1911	08/12/1911	11/15/1903	0	22503.19676	78A		2	0			
44	595	DIAMOND DITCH	1	9	ELKHEAD CK	54	NE	NE	2	7	N	89	W	S	1	11.7000	C	S,CAB	09/23/1911	08/12/1911	11/15/1903	0	22503.19676	78A	84CW0071	3		0		
44	708	MCKINLAY DITCH NO 2	1	9	ELKHEAD CK	54	NE	SE	17	8	N	88	W	S	1	2.0000	C	S	06/16/1913	06/09/1913	09/15/1904	0	23170.19981	78.5AA4		2	0	0 DECREED IN WD57		
44	724	NORVELL DITCH	1	9	ELKHEAD CK	41	SE	NE	25	7	N	90	W	S	1	20.0000	C	S	09/01/1960	06/01/1948	08/01/1939	0	36296.32627	47A	CA1278	2		0		
44	763	SMITH DITCH	1	9	ELKHEAD CK	54	NW	NW	28	7	N	89	W	S	1	13.3300	C	S	09/01/1960	05/01/1948	05/01/1939	0	36296.32627	47A	CA1278	3		0		
44	3902	ELKHEAD RESERVOIR	3	9	ELKHEAD CK	41	SE	SW	16	7	N	89	W	S	12*	8310.0000	A	S,AP	09/01/1960	05/01/1948	06/08/1954	0	38144.00000	11	79CW0110	1	4403992	ALT PT FOR JUNIPER RESERVOIR 79CW110		
44	4320	CALIFORNIA PARK RES	3	9	ELKHEAD CK	54	SW	SW	17	9	N	87	W	S	X	210.0000	C	S,CAP	03/30/1964	06/22/1967	06/02/1958	0	39599.00000	46	W1091	7	5802127	ALTERNATE POINT FOR FOUR COUNTIES - FISH CREEK.		
44	4320	CALIFORNIA PARK RES	3	9	ELKHEAD CK	54	SW	SW	17	9	N	87	W	S	X	705.0000	C	S,CAP	03/30/1964	06/22/1967	06/02/1958	0	39599.00000	46	W1091	8	5802107	ALTERNATE POINT FOR FOUR COUNTIES - FISH CREEK.		
44	4320	CALIFORNIA PARK RES	3	9	ELKHEAD CK	54	SW	SW	17	9	N	87	W	S	X	36536.1000	A	S,C	05/30/1972	09/01/1960	09/07/1962	0	41126.00000	42	CA2259	1	0	0 DIL 85CW107,89CW101,96CW63,96CW61,13699 AF TT ELKHEAD RES 93CW131		
44	4320	CALIFORNIA PARK RES	3	9	ELKHEAD CK	54	SW	SW	17	9	N	87	W	S	X	13699.0000	A	S,C,TF	05/30/1972	09/01/1960	09/07/1962	0	41126.00000	42	93CW0131	2	4403902	TT ELKHEAD RES		
44	2007	ELKHEAD CANAL	1	9	ELKHEAD CK	54	SE	NE	4	8	N	88	W	S	X	145.0000	C	S,C	05/30/1972	09/01/1960	09/07/1962	0	41126.00000	42A	CA2259	1	0	0 DILIGENCE 85CW107,89CW101,96CW61		
44	3902	ELKHEAD RESERVOIR	3	9	ELKHEAD CK	41	SE	SW	16	7	N	89	W	S	X	13699.0000	A	S,C,TT	05/30/1972	09/01/1960	09/07/1962	0	41126.00000	42	93CW0131	2	4404320	TF CALIF. PK RES. DIL 96CW63		
44	4320	CALIFORNIA PARK RES	3	9	ELKHEAD CK	54	SW	SW	17	9	N	87	W	S	X	214.0000	C	S,CAP	05/30/1972	03/30/1964	05/20/1963	0	41727.41412	C45	W1091	9	5802107	ALTERNATE POINT FOR FOUR COUNTIES - WALTON CREEK.		
44	4320	CALIFORNIA PARK RES	3	9	ELKHEAD CK	54	SW	SW	17	9	N	87	W	S	X	363.0000	C	S,CAP	05/30/1972	03/30/1964	05/20/1963	0	41727.41412	C45	W1091	10	5802127	ALTERNATE POINT FOR FOUR COUNTIES - FISH CREEK.		
44	4320	CALIFORNIA PARK RES	3	9	ELKHEAD CK	54	SW	SW	17	9	N	87	W	S	X	287.0000	C	S,CAP	05/30/1972	03/30/1964	05/20/1963	0	41727.41412	C45	W1091	11	5802108	ALTERNATE POINT FOR FOUR COUNTIES - HARRISON CREEK.		
44	3902	ELKHEAD RESERVOIR	3	9	ELKHEAD CK	41	SE	SW	16	7	N	89	W	S	160	5389.0000	A	S,C	05/30/1972	09/01/1960	10/01/1966	0	426							

44	763 SMITH DITCH	1	3	ELKHEAD CK	54	NW	NW	28	7 N	89 W	S	1	2,000.0	C	S	12/31/1989	12/31/1988	04/15/1988	0	50769.50509		88CW0038	4		0	LONG HEADGATE #1
44	1782 PANKEY ELKHEAD CK LD 1		3	ELKHEAD CK	41	SW	NW	30	7 N	89 W	S	9	0.0330	C	S	12/31/1996	12/31/1995	08/03/1912	0	53325.22860		96CW0007	1		0	
44	1783 PANKEY ELKHEAD CK LD 2		3	ELKHEAD CK	41	SE	NE	25	7 N	90 W	S	9	0.0330	C	S	12/31/1996	12/31/1995	08/03/1912	0	53325.22860		96CW0007	1		0	
44	1784 PANKEY ELKHEAD CK LD 4		3	ELKHEAD CK	41	SW	SE	25	7 N	90 W	S	9	0.0330	C	S	12/31/1996	12/31/1995	08/03/1912	0	53325.22860		96CW0007	1		0	
44	1785 PANKEY ELKHEAD CK LD 5		3	ELKHEAD CK	41	SW	SE	25	7 N	90 W	S	9	0.0330	C	S	12/31/1996	12/31/1995	08/03/1912	0	53325.22860		96CW0007	1		0	
44	1786 PANKEY ELKHEAD CK LD 6		3	ELKHEAD CK	41	SW	SE	25	7 N	90 W	S	9	0.0330	C	S	12/31/1996	12/31/1995	08/03/1912	0	53325.22860		96CW0007	1		0	
44	1786 VANTASSEL ELKHEAD LD 1		3	ELKHEAD CK	41	SW	SE	35	7 N	90 W	S	9	0.0330	C	S	12/31/1996	12/31/1995	08/12/1912	0	53325.22869		96CW0009	1		0	
44	1791 VANTASSEL ELKHEAD LD 2		3	ELKHEAD CK	41	NW	NE	36	7 N	90 W	S	9	0.0330	C	S	12/31/1996	12/31/1995	08/12/1912	0	53325.22869		96CW0009	1		0	
44	1965 K&S LIVESTOCK DIV. NO.1	1	3	ELKHEAD CK	41	NW	NW	28	7 N	89 W	S	9	0.0330	C	S	12/31/2000	12/31/1999	08/03/1912	0	54786.22860		00CW0068	1		0	
44	1966 K&S LIVESTOCK DIV. NO.2	1	3	ELKHEAD CK	41	NE	NE	29	7 N	89 W	S	9	0.0330	C	S	12/31/2000	12/31/1999	08/03/1912	0	54786.22860		00CW0068	1		0	
44	1967 K&S LIVESTOCK DIV. NO.3	1	3	ELKHEAD CK	41	NE	NE	29	7 N	89 W	S	9	0.0330	C	S	12/31/2000	12/31/1999	08/03/1912	0	54786.22860		00CW0068	1		0	
44	1968 K&S LIVESTOCK DIV. NO.4	1	3	ELKHEAD CK	41	SW	NE	30	7 N	89 W	S	9	0.0330	C	S	12/31/2000	12/31/1999	08/03/1912	0	54786.22860		00CW0068	1		0	
44	1969 K&S LIVESTOCK DIV. NO.5	1	3	ELKHEAD CK	41	SW	NW	30	7 N	89 W	S	9	0.0330	C	S	12/31/2000	12/31/1999	08/03/1912	0	54786.22860		00CW0068	1		0	
44	1970 K&S LIVESTOCK DIV. NO.6	1	3	ELKHEAD CK	41	NW	SW	30	7 N	89 W	S	9	0.0330	C	S	12/31/2000	12/31/1999	08/03/1912	0	54786.22860		00CW0068	1		0	
44	1973 HARLEY JR SPRING	4	3	ELKHEAD CK	54	SW	NW	11	7 N	89 W	S	89	0.0110	C	S	12/31/2000	12/31/1999	04/18/2000	0	54895.00000		00CW0014	1		0	
44	4727 DAVENPORT RESERVOIR NO. 1	3	3	ELKHEAD CK	41	SE	SE	17	7 N	89 W	S	9	1.0004	A	S	12/31/2000	12/31/1999	05/02/2000	0	54809.00000		00CW0018	1		0	
44	4727 DAVENPORT RESERVOIR NO. 1	3	3	ELKHEAD CK	41	SE	SE	17	7 N	89 W	S	9	1.0004	A	S,C	12/31/2000	12/31/1999	05/02/2000	0	54809.00000		00CW0018	1		0	
44	1987 VAUGHAN PUMP #1	4	3	ELKHEAD CK	41	SE	SW	30	7 N	89 W	S	19	2.0000	C	S	12/31/2001	12/31/2000	07/07/2001	0	55340.00000		01CW0014	1		0	
44	4712 WYMORE RESERVOIR NO. 1	3	3	ELKHEAD CK	41	SE	SW	7	7 N	89 W	S	9W	1.0004	A	S	12/31/2002	12/31/2001	06/15/1971	0	55517.44300		02CW0038	1		0	
44	2338 ROLANDO #1	4	3	ELKHEAD CK	54	SE	NE	6	7 N	88 W	S	9	0.0089	C	S	12/31/2002	12/31/2001	12/31/1978	0	55517.47116		02CW0071	1		0	
44	4708 HAROLD'S RESERVOIR NO. 1	3	3	ELKHEAD CK	41	NE	SE	7	7 N	89 W	S	9W	1.0004	A	S	12/31/2002	12/31/2001	09/15/2000	0	55517.55045		02CW0038	1		0	
44	4710 BURNT RESERVOIR	3	3	ELKHEAD CK	41	SE	SW	7	7 N	89 W	S	9W	1.0004	A	S	12/31/2002	12/31/2001	09/20/2000	0	55517.55055		02CW0038	1		0	
44	2337 ROLANDO #2	4	3	ELKHEAD CK	54	SE	NE	6	7 N	88 W	S	9	0.0134	C	S	12/31/2002	12/31/2001	08/21/2002	0	55750.00000		02CW0071	1		0	
44	2338 ROLANDO #3	4	3	ELKHEAD CK	54	SE	NE	6	7 N	88 W	S	9	0.0067	C	S	12/31/2002	12/31/2001	08/21/2002	0	55750.00000		02CW0071	1		0	
44	597 ELKHEAD RES ENL POWER CONDUIT	7	3	ELKHEAD CK	41	SE	SW	16	7 N	89 W	S	P	200.0000	C	S,C	12/31/2002	12/31/2001	10/16/2002	0	55806.00000		02CW0109	1		0	
44	3902 ELKHEAD RESERVOIR	3	3	ELKHEAD CK	41	SE	SW	16	7 N	89 W	S	12	13000.0000	A	S,C	12/31/2002	12/31/2001	10/16/2002	0	55806.00000		02CW0109	7		0	RIGHT TO USE AND REUSE. RIGHT TO REILL TO A MAX OF 1000 AF.
44	2072 FIRST CREEK MSF	0	119	FIRST CK	54	NW	SE	17	9 N	86 W	S	M	3.0000	C	S	12/31/1977	12/31/1976	09/23/1977	0	46652.00000		W1348-77	1		0	HEADWATERS TO ELKHEAD CK
44	2086 SOKODOWSKI CREEK MSF	0	120	SOKODOWSKI CK	54	NW	SW	33	10 N	87 W	S	M	1.0000	C	S	12/31/1977	12/31/1976	09/23/1977	0	46652.00000		W1346-77	1		0	HEADWATERS TO ELKHEAD CK
44	678 KNOWLES IRR D	1	45	KNOWLES CK	54	NE	SE	3	9 N	87 W	S	1	1.3300	C	S,C,AB	06/08/1910	06/06/1910	07/16/1907	0	22071.21011	89	91CW0071	1		0	
44	678 KNOWLES IRR D	1	45	KNOWLES CK	54	NE	SE	3	9 N	87 W	S	1	1.3300	C	S	06/08/1910	06/06/1910	07/16/1907	0	22071.21011	89		2		0	
44	678 KNOWLES IRR D	1	45	KNOWLES CK	54	NE	SE	3	9 N	87 W	S	1	1.0000	C	S,AB	06/08/1910	06/06/1910	07/16/1907	0	22071.21011	83	91CW0116	1		0	
44	678 KNOWLES IRR D	1	45	KNOWLES CK	54	NE	SE	3	9 N	87 W	S	1	1.0000	C	S	06/08/1910	06/06/1910	07/16/1907	0	22071.21011	83		1		0	
44	2080 HAXTON DIVERSION	1	39	LITTLE COTTONWOOD CK	41	NE	SE	27	8 N	89 W	S	169	0.2500	C	S	12/31/1979	12/31/1978	07/01/1974	0	47116.45472		79CW0106	1		0	
44	2008 ELKHEAD LATERAL	1	103	LONG GULCH	41	SE	SW	11	8 N	89 W	S	X	40.0000	C	S,C	05/09/1972	09/01/1960	08/07/1962	0	41126.00000	428	CA2259	1		0	DILIGENCE 85CW107,89CW101,96CW61
44	1072 PATTERSON SPG	4	103	LONG GULCH	41	SW	SW	24	8 N	89 W	S	880	0.1330	C	S	12/31/1974	12/31/1973	06/10/1910	0	45290.22075		W0617-74	1		0	
44	2180 WISEMAN SPG	4	103	LONG GULCH	41	SE	NE	23	8 N	89 W	S	89	0.0330	C	S	12/31/1981	12/31/1980	06/01/1966	0	47847.42520		81CW0058	1		0	
44	3653 TWO BAR RES 101	3	103	LONG GULCH	41	SE	SE	14	8 N	89 W	S	9	2.0004	A	S	12/31/1983	12/31/1982	06/10/1963	0	48577.41433		83CW0169	1		0	
44	3786 TWO BAR BLM RES 34	3	103	LONG GULCH	41	NE	NE	12	8 N	89 W	S	9	1.0004	A	S	12/31/1983	12/31/1982	06/20/1963	0	48577.41443		83CW0174	1		0	
44	3657 TWO BARS RES 106	3	103	LONG GULCH	41	SW	NW	14	8 N	89 W	S	9	1.0004	A	S	12/31/1983	12/31/1982	07/10/1963	0	48577.41463		83CW0169	1		0	
44	3663 TWO BAR RES 112	3	103	LONG GULCH	41	NE	NE	14	8 N	89 W	S	9	3.0004	A	S	12/31/1983	12/31/1982	07/15/1969	0	48577.33830		83CW0169	1		0	
44	3664 TWO BAR RES 114	3	103	LONG GULCH	41	NW	SW	12	8 N	89 W	S	9	1.0004	A	S	12/31/1983	12/31/1982	07/10/1969	0	48577.43654		83CW0169	1		0	
44	3665 TWO BAR RES 115	3	103	LONG GULCH	41	NW	NE	11	8 N	89 W	S	9	0.2504	A	S	12/31/1983	12/31/1982	07/15/1969	0	48577.43664		83CW0169	1		0	
44	3667 TWO BAR RES 117	3	103	LONG GULCH	41	NW	NW	12	8 N	89 W	S	9	3.0004	A	S	12/31/1983	12/31/1982	08/01/1969	0	48577.43677		83CW0169	1		0	
44	3668 TWO BARS RES 107	3	103	LONG GULCH	41	NW	NE	14	8 N	89 W	S	9	0.5000	A	S	12/31/1983	12/31/1982	07/20/1974	0	48577.45491		83CW0169	1		0	
44	3659 TWO BAR RES 108	3	103	LONG GULCH	41	NW	NW	14	8 N	89 W	S	9	0.5000	A	S	12/31/1983	12/31/1982	08/01/1974	0	48577.45503		83CW0169	1		0	
44	3660 TWO BAR RES 116	3	103	LONG GULCH	41	NE	NE	11	8 N	89 W	S	9	0.2504	A	S	12/31/1983	12/31/1982	08/15/1974	0	48577.45517		83CW0169	1		0	
44	3668 TWO BAR RES 118	3	103	LONG GULCH	41	SE	SE	2	8 N	89 W	S	9	0.5000	A	S	12/31/1983	12/31/1982	08/20/1974	0	48577.45522		83CW0169	1		0	
44	3669 TWO BAR RES 119	3	103	LONG GULCH	41	NE	SE	11	8 N	89 W	S	9	0.1000	A	S	12/31/1983	12/31/1982	09/01/1974	0	48577.45534		83CW0169	1		0	
44	3784 TWO BAR BLM RES 32	3	103	LONG GULCH	41	NW	SE	11	8 N	89 W	S	9	0.5004	A	S	12/31/1983	12/31/1982	06/30/1975	0	48577.45584		83CW0174	1		0	
44	3785 TWO BAR BLM RES 33	3	103	LONG GULCH	41	SE	SW	11	8 N	89 W	S	9	1.0004	A	S	12/31/1983	12/31/1982	07/05/1975	0	48577.45641		83CW0174	1		0	
44	3650 TWO BAR RES 105	3	103	LONG GULCH	41	SW	NW	24	8 N	89 W	S	9	1.0004	A	S,C	12/31/1983	12/31/1982	11/16/1983	0	48897.00000		83CW0169	1		0	
44	3650 TWO BAR RES 105	3	103	LONG GULCH	41	NW	SW	14	8 N	89 W	S	9	1.0004	A	S,C,AB	12/31/1983	12/31/1982	11/16/1983	0	48897.00000		83CW0169	2		0	ABANDONED 1 AF 9/22/88
44	1613 DIXON SPG #1	4	103	LONG GULCH	41	SW	NW	24	8 N	89 W	S	9	0.0110	C	S	12/31/1994	12/31/1993	05/10/1940	0	52595.33002		94CW0086	1		0	
44	1614 DIXON SPG #2	4	103	LONG GULCH	41	NW	SW	24	8 N	89 W	S	9	0.0022	C	S	12/31/1994	12/31/1993	05/10/1940	0	52595.33002						

44	2250 RUSTLERS SPRING 2	4	124	MILL CK	54	SE	NW	4	8 N	87 W	S	689	0.0330	C	S.C	12/31/1982	12/31/1981	12/15/1982	0	48561.00000	82CW0231	1	0	0
44	2250 RUSTLERS SPRING 2	4	124	MILL CK	54	SE	NW	4	8 N	87 W	S	689	0.0330	C	S.CA	12/31/1982	12/31/1981	12/15/1982	0	48561.00000	90CW0022	2	0	0
44	3740 RAFTOPOULOS Q MTN RES 8	3	124	MILL CK	54	SE	SW	8	8 N	87 W	S	9	1.0000	A	S	12/31/1983	12/31/1982	06/25/1987	0	48577.42909	83CW0179	1	0	0
44	3747 RAFTOPOULOS Q MTN RES 9	3	124	MILL CK	54	SE	SW	8	8 N	87 W	S	9	1.0000	A	S	12/31/1983	12/31/1982	07/01/1987	0	48577.42915	83CW0179	1	0	0
44	3758 RAFTOPOULOS Q MTN RES 7	3	124	MILL CK	54	SW	SE	9	8 N	87 W	S	9	1.0000	A	S.C.AB	12/31/1983	12/31/1982	11/16/1983	0	48897.00000	83CW0179	2	0	0
44	3758 RAFTOPOULOS Q MTN RES 7	3	124	MILL CK	54	SW	SE	9	8 N	87 W	S	9	1.0000	A	S.C	12/31/1983	12/31/1982	11/16/1983	0	48897.00000	83CW0179	1	0	0
44	1208 MULKEY SPRING	4	124	MILL CK	54	SW	NW	11	8 N	87 W	S	189	0.0220	C	S	12/31/1986	12/31/1985	07/01/1988	0	49673.49490	86CW0109	1	0	0
44	3938 LOWER ERWIN RESERVOIR	3	124	MILL CK	54	SW	NE	4	8 N	87 W	S	569	1.0000	A	S	12/31/1987	12/31/1986	02/29/1981	0	50038.47894	87CW0089	1	0	0
44	3938 UPPER ERWIN RESERVOIR	3	124	MILL CK	54	NW	NE	4	8 N	87 W	S	569	2.0000	A	S	12/31/1987	12/31/1986	02/28/1981	0	50038.47906	87CW0089	1	0	0
44	1210 MULKEY SPRING 2	4	124	MILL CK	54	SW	NW	4	8 N	87 W	S	9	0.0220	C	S	12/31/1987	12/31/1986	07/01/1983	0	50038.48759	87CW0040	1	0	0
44	3938 MULKEY RESERVOIR	3	124	MILL CK	54	SW	NW	4	8 N	87 W	S	9	1.2500	A	S	12/31/1987	12/31/1986	09/15/1985	0	50038.49566	87CW0041	1	0	0
44	1261 BILL'S SPRING	4	124	MILL CK	54	NE	NE	4	8 N	87 W	S	69	0.0330	C	S	12/31/1988	12/31/1987	02/28/1981	0	50403.47906	88CW0027	1	0	0
44	1262 WHITE SPRING	4	124	MILL CK	54	SW	NE	4	8 N	87 W	S	8	0.0330	C	S	12/31/1988	12/31/1987	02/28/1981	0	50403.47906	88CW0027	1	0	0
44	4245 BILL POND	3	124	MILL CK	54	NE	NE	4	6 N	87 W	S	58	0.1000	A	S	12/31/1990	12/31/1989	06/01/1990	0	51286.00000	90CW0089	1	0	0
44	4244 FAWNIA POND	3	124	MILL CK	54	NE	NE	4	6 N	87 W	S	58	0.1000	A	S	12/31/1990	12/31/1989	06/01/1990	0	51286.00000	90CW0089	1	0	0
44	4243 JIM POND	3	124	MILL CK	54	NE	NE	4	6 N	87 W	S	58	0.1000	A	S	12/31/1990	12/31/1989	06/01/1990	0	51286.00000	90CW0089	1	0	0
44	614 ELLIS & KITCHENS D	1	34	NORTH FK of ELKHEAD CK	54	SW	NW	33	9 N	88 W	S	1	1.6600	C	S	10/01/1904	09/24/1904	05/26/1903	0	19990.19503	75	4	0	
44	614 ELLIS & KITCHENS D	1	34	NORTH FK of ELKHEAD CK	54	NW	NW	33	9 N	88 W	S	1	1.6600	C	S.C.AB	10/01/1904	09/24/1904	05/26/1903	0	19990.19503	75	4	0	
44	614 ELLIS & KITCHENS D	1	34	NORTH FK of ELKHEAD CK	54	NW	NW	33	9 N	88 W	S	1	1.6600	C	S.C	10/01/1904	09/24/1904	05/26/1903	0	19990.19503	75	4	0	
44	2211 OLD ELLIS & KITCHENS DIT	1	34	NORTH FK of ELKHEAD CK	41	NW	NW	26	9 N	88 W	S	1	1.6600	C	S.C.AP	10/01/1904	09/24/1904	05/26/1903	0	19990.19503	75	4	0	
44	2211 OLD ELLIS & KITCHENS DIT	1	34	NORTH FK of ELKHEAD CK	41	NW	NW	26	9 N	88 W	S	1	1.6600	C	S.AP	10/01/1904	09/24/1904	05/26/1903	0	19990.19503	75	4	0	
44	533 ANDERSON DITCH	1	34	NORTH FK of ELKHEAD CK	54	NW	SE	6	8 N	88 W	S	1	5.0000	C	S	09/01/1906	09/26/1905	06/01/1906	0	20605.00000	82	1	0	
44	3677 ANDERSON RES	3	34	NORTH FK of ELKHEAD CK	54	NW	SE	6	8 N	88 W	S	1	20.1100	A	S	09/01/1906	09/26/1905	06/01/1906	0	20605.00000	82	1	0	
44	3677 ANDERSON RES	3	34	NORTH FK of ELKHEAD CK	54	NW	SE	6	8 N	88 W	S	1	110.9400	A	S	09/01/1906	09/26/1905	06/01/1906	0	20605.00000	82	2	0	
44	3677 ANDERSON RES	3	34	NORTH FK of ELKHEAD CK	54	NW	SE	6	8 N	88 W	S	1	12.1100	A	S	09/01/1906	09/26/1905	06/01/1906	0	20605.00000	82	3	0	
44	2362 PARK IRRIGATION CANAL NO. 2	3	34	NORTH FK of ELKHEAD CK	54				8 N	88 W	S	18	652.0000	C	S.C	06/15/1911	06/14/1911	10/24/1904	0	22444.20200	78 1/2 AA	CA0663	1	0
44	2362 PARK IRRIGATION CANAL NO. 2	3	34	NORTH FK of ELKHEAD CK	54				8 N	88 W	S	18	597.0000	C	S.C	06/15/1911	06/14/1911	10/24/1909	0	22444.21719	88	CA0663	2	0
44	2022 NORTH ELKHEAD FEEDER CNL	1	34	NORTH FK of ELKHEAD CK	54	NE	NW	5	8 N	88 W	S	X	145.0000	A	S.C	05/01/1912	09/01/1900	08/07/1982	0	41128.00000	420	CA2259	1	0
44	614 ELLIS & KITCHENS D	1	34	NORTH FK of ELKHEAD CK	54	NW	NW	33	9 N	88 W	S	1	0.0000	C	S.CA	12/31/1975	12/31/1974	10/16/1968	0	48559.32657	81CW0174	1	0	0
44	3795 TWO BAR BLM RES 42	3	34	NORTH FK of ELKHEAD CK	54	NW	NW	32	9 N	88 W	S	9	2.0000	A	S	12/31/1983	12/31/1982	07/30/1983	0	48577.41483	83CW0174	1	0	0
44	3796 TWO BAR BLM RES 43	3	34	NORTH FK of ELKHEAD CK	54	SW	NW	32	9 N	88 W	S	9	1.0000	A	S	12/31/1983	12/31/1982	08/05/1983	0	48577.41488	83CW0174	1	0	0
44	852 ROCK SPRINGS GULCH DITCH	1	97	ROCK SPRINGS GULCH	54	NE	SE	25	7 N	89 W	S	81	2.0000	C	S	05/01/1972	09/01/1960	06/01/1948	0	40421.35946	18A	CA2259	1	0
44	1108 BLAKE SPG NO 9	4	97	ROCK SPRINGS GULCH	54	NW	NW	30	7 N	88 W	S	9	0.1000	C	S	12/31/1972	12/31/1971	06/10/1939	0	44559.32667	W0362-72	1	0	0
44	3923 BLAKE STK POND NO 10	3	97	ROCK SPRINGS GULCH	54	NW	NW	30	7 N	88 W	S	9	0.0200	A	S	12/31/1972	12/31/1971	06/10/1939	0	44559.32667	W0362-72	1	0	0
44	3922 BLAKE STK POND NO 1	3	97	ROCK SPRINGS GULCH	54	NW	SW	30	7 N	88 W	S	9	0.4000	A	S	12/31/1972	12/31/1971	07/10/1939	0	44559.32667	W0362-72	1	0	0
44	3731 FREDRICKSON RES NO 1	3	97	ROCK SPRINGS GULCH	54	NW	SE	11	7 N	89 W	S	89	5.2300	A	S	12/31/1972	12/31/1971	05/01/1950	0	44559.36645	W0154-72	1	0	0
44	3732 FREDRICKSON RES NO 2	3	97	ROCK SPRINGS GULCH	54	SW	NE	11	7 N	89 W	S	88	2.6400	A	S	12/31/1972	12/31/1971	05/01/1950	0	44559.36645	W0154-72	1	0	0
44	867 LOUIS DITCH NO 1	1	97	ROCK SPRINGS GULCH	54	NW	SE	11	7 N	89 W	S	189	2.7500	C	S	12/31/1972	12/31/1971	05/01/1950	0	44559.36645	W0153-72	1	0	0
44	867 LOUIS DITCH NO 1	1	97	ROCK SPRINGS GULCH	54	NW	SE	11	7 N	89 W	S	189	2.7500	C	S.AB	12/31/1972	12/31/1971	09/01/1950	0	44559.36645	81CW0117	2	0	0
44	3733 FREDRICKSON RES NO 3	3	97	ROCK SPRINGS GULCH	54	NW	SE	11	7 N	89 W	S	019	9.3600	A	S	12/31/1972	12/31/1971	05/01/1950	0	44559.39997	W0154-72	1	0	0
44	3734 FREDRICKSON RES NO 4	3	97	ROCK SPRINGS GULCH	54	NW	NE	11	7 N	89 W	S	18	2.8100	A	S	12/31/1972	12/31/1971	05/01/1950	0	44559.40328	W0154-72	1	0	0
44	845 LOUIS DITCH 2	1	97	ROCK SPRINGS GULCH	54	NW	NE	11	7 N	89 W	S	189	2.7500	C	S	12/31/1972	12/31/1971	09/01/1971	0	44559.44437	W0153-72	1	0	0
44	793 BLAKE SPG NO 7	4	97	ROCK SPRINGS GULCH	54	NW	NW	30	7 N	88 W	S	9	0.1000	C	S	12/31/1972	12/31/1971	07/10/1972	0	44751.00000	W0362-72	1	0	0
44	1141 BLAKE SPG NO 8	4	97	ROCK SPRINGS GULCH	54	NW	NW	30	7 N	88 W	S	9	0.1000	C	S	12/31/1972	12/31/1971	07/10/1972	0	44751.00000	W0362-72	1	0	0
44	1032 BLAKE SPG NO 11	4	97	ROCK SPRINGS GULCH	54	SE	NW	30	7 N	88 W	S	9	0.1000	C	S	12/31/1972	12/31/1971	07/10/1972	0	44751.00000	W0362-72	1	0	0
44	1020 BLAKE SPG NO 3	4	97	ROCK SPRINGS GULCH	54	SW	SW	30	7 N	88 W	S	19	0.0800	C	S	12/31/1973	12/31/1972	07/06/1946	0	44925.35250	W0423-73	1	0	0
44	1028 BLAKE DITCH NO 44	1	97	ROCK SPRINGS GULCH	54	SE	SW	30	7 N	88 W	S	19	0.1000	C	S	12/31/1973	12/31/1972	07/10/1972	0	44925.44751	W0423-73	1	0	0
44	1030 BLAKE SPG NO 2	4	97	ROCK SPRINGS GULCH	54	NW	SW	30	7 N	88 W	S	19	0.0500	C	S	12/31/1973	12/31/1972	07/10/1972	0	44925.44751	W0423-73	1	0	0
44	1031 BLAKE SPG NO 4	4	97	ROCK SPRINGS GULCH	54	SE	SW	30	7 N	88 W	S	19	0.0500	C	S	12/31/1973	12/31/1972	07/10/1972	0	44925.44751	W0423-73	1	0	0
44	1029 BLAKE SPG NO A3	4	97	ROCK SPRINGS GULCH	54	SW	SW	30	7 N	88 W	S	19	0.0500	C	S	12/31/1973	12/31/1972	07/10/1972	0	44925.44751	W0423-73	1	0	0
44	1078 ZEHNER SPG SITE D	4	97	ROCK SPRINGS GULCH	54	SE	SW	30	7 N	88 W	S	189	0.0400	C	S	12/31/1974	12/31/1973	06/01/1989	0	45390.33627	W0759-74	1	0	0
44	1081 ZEHNER SPG SITE F	4	97	ROCK SPRINGS GULCH	54	NE	NE	36	7 N	89 W	S	9	0.0200	C	S	12/31/1974	12/31/1973	06/01/1989	0	45390.43614	W0759-74	1	0	0
44	2069 COTTONWOOD SPG	4	97	ROCK SPRINGS GULCH	54	SE	SE	11	7 N	89 W	S	9	0.0300	C	S.C	12/31/1977	12/31/1976	06/15/1976	0	46386.46187	W1129-77	1	0	0
44	2069 COTTONWOOD SPG	4	97	ROCK SPRINGS GULCH	54	SE	SE	11	7 N	89 W	S	9	0.0300	C	S.CA	12/31/1977	12/31/1976	06/15/1976	0	46386.46187	81CW0250	2	0	0
44	2071 EAST SUNSHINE SPG	4	97	ROCK SPRINGS GULCH	54	SE	NE	14	7 N	89 W	S	8	0.0300	C	S	12/31/1977	12/31/1976	06/15/1976	0	46386.46187	W1129-77	1	0	0
44	2081 HILLSIDER SPG	4	97	ROCK SPRINGS GULCH	54	SE	NW	13	7 N	89 W	S	9	0.0300	C	S.C	12/31/1977	12/31/1976	06/15/1976						

44	2086	JACK SPG 5	4	97	ROCK SPRINGS GULCH	54	SE	SW	24	7 N	89 W	S	689	0.0330	C	S.C	12/31/1980	12/31/1979	01/03/1980	0	47484.00000	80CW0002	1	0	0	
44	2086	JACK SPG 5	4	97	ROCK SPRINGS GULCH	54	SE	SW	24	7 N	89 W	S	689	0.0330	C	S.C,AB	12/31/1980	12/31/1979	01/03/1980	0	47484.00000	80CW0002	3	0	0	
44	2087	JACK SPG 6	4	97	ROCK SPRINGS GULCH	54	NW	SE	25	7 N	89 W	S	689	0.0330	C	S.C	12/31/1980	12/31/1979	01/03/1980	0	47484.00000	80CW0002	1	0	0	
44	2087	JACK SPG 6	4	97	ROCK SPRINGS GULCH	54	NW	SE	25	7 N	89 W	S	689	0.0330	C	S.C,AB	12/31/1980	12/31/1979	01/03/1980	0	47484.00000	80CW0002	3	0	0	
44	2088	JACK SPG 7	4	97	ROCK SPRINGS GULCH	54	SE	SE	25	7 N	89 W	S	689	0.0330	C	S.C	12/31/1980	12/31/1979	01/03/1980	0	47484.00000	80CW0002	1	0	0	
44	2088	JACK SPG 7	4	97	ROCK SPRINGS GULCH	54	SE	SE	25	7 N	89 W	S	689	0.0330	C	S.C,AB	12/31/1980	12/31/1979	01/03/1980	0	47484.00000	80CW0002	3	0	0	
44	2092	CARL SPG	4	97	ROCK SPRINGS GULCH	54	NW	NW	34	7 N	89 W	S	689	0.1000	A	S	12/31/1980	12/31/1979	06/26/1980	0	47659.00000	80CW0071	1	0	0	
44	2103	SJOSTROM SPG NO 2	4	97	ROCK SPRINGS GULCH	54	SE	SE	14	7 N	89 W	S	69	0.0330	C	S.C	12/31/1980	12/31/1979	12/31/1980	0	47847.00000	80CW0253	1	0	0	
44	2103	SJOSTROM SPG NO 2	4	97	ROCK SPRINGS GULCH	54	SE	SE	14	7 N	89 W	S	69	0.0330	C	S.CA	12/31/1980	12/31/1979	12/31/1980	0	47847.00000	80CW0023	2	0	0	
44	2104	SJOSTROM SPG NO 3	4	97	ROCK SPRINGS GULCH	54	SW	SE	11	7 N	89 W	S	69	0.0330	C	S.C	12/31/1980	12/31/1979	12/31/1980	0	47847.00000	80CW0253	1	0	0	
44	2104	SJOSTROM SPG NO 3	4	97	ROCK SPRINGS GULCH	54	SW	SE	11	7 N	89 W	S	69	0.0330	C	S.CA	12/31/1980	12/31/1979	12/31/1980	0	47847.00000	80CW0042	2	0	0	
44	2199	BACKES SPRING	4	97	ROCK SPRINGS GULCH	54	SE	NE	24	7 N	89 W	S	189	0.0330	C	S	12/31/1981	12/31/1980	06/05/1920	0	47847.25723	81CW0155	1	0	0	
44	1235	BEST SPRING	4	97	ROCK SPRINGS GULCH	54	SW	SW	19	7 N	88 W	S	19	0.0110	C	S	12/31/1988	12/31/1987	07/01/1961	0	50403.40024	88CW0091	1	0	0	
44	1271	SILVER SPRING	4	97	ROCK SPRINGS GULCH	54	SW	SE	11	7 N	88 W	S	9	0.0330	C	S	12/31/1988	12/31/1987	07/01/1984	0	50403.49125	88CW0096	1	0	0	
44	1744	ADAMS SPRING	4	97	ROCK SPRINGS GULCH	54	SE	SW	19	7 N	89 W	S	9	0.0330	C	S	12/31/1995	12/31/1994	06/30/1995	0	53141.00000	95CW0131	1	0	0	
44	1922	PATRICK & GLENDA SPG #1	4	97	ROCK SPRINGS GULCH	54	NE	NW	31	7 N	88 W	S	189	0.0440	C	S	12/31/1998	12/31/1997	07/22/1998	0	54259.00000	98CW0098	1	0	0	
44	1996	QUIET SPRING	4	97	ROCK SPRINGS GULCH	54	NE	NE	24	7 N	89 W	S	9	0.0440	C	S	12/31/1998	12/31/1997	08/01/1988	0	54259.00000	98CW0094	1	0	0	
44	2086	JACK SPG 5	4	97	ROCK SPRINGS GULCH	54	SE	SW	24	7 N	89 W	S	69	0.0330	C	S	12/31/1998	12/31/1997	11/23/1998	0	54383.00000	98CW0090	2	0	0	
44	2087	JACK SPG 6	4	97	ROCK SPRINGS GULCH	54	NW	SE	25	7 N	89 W	S	69	0.0330	C	S	12/31/1998	12/31/1997	11/23/1998	0	54383.00000	98CW0090	2	0	0	
44	2088	JACK SPG 7	4	97	ROCK SPRINGS GULCH	54	SE	SE	25	7 N	89 W	S	69	0.0330	C	S	12/31/1998	12/31/1997	11/23/1998	0	54383.00000	98CW0090	2	0	0	
44	1974	PATRICK & GLENDA SPG #2	4	97	ROCK SPRINGS GULCH	54	NW	NW	31	7 N	88 W	S	9	0.0440	C	S	12/31/2001	12/31/2000	07/01/2000	0	55152.54969	01CW0010	1	0	0	
44	772	STUCKEY DITCH	1	46	STUCKEY CK	54	SE	NW	8	9 N	87 W	S	1	7.7500	C	S,AB	09/29/1910	06/17/1910	08/03/1906	0	22082.20668	82AA	81CW0116	2	0	0
44	772	STUCKEY DITCH	1	46	STUCKEY CK	54	SE	NW	8	9 N	87 W	S	1	7.7500	C	S	09/29/1910	06/17/1910	08/03/1906	0	22082.20668	82AA		1	0	0
44	663	JOKODOWSKY DITCH	1	43	SUGAR CK	54	NW	SW	4	9 N	87 W	S	1	1.5000	C	S,C,AB	06/22/1909	10/08/1908	07/15/1906	0	21465.20649	82A	84CW0071	4	0	0
44	663	JOKODOWSKY DITCH	1	43	SUGAR CK	54	NW	SW	4	9 N	87 W	S	1	1.5000	C	S.C	06/22/1909	10/08/1908	07/15/1906	0	21465.20649	82A		2	0	0
44	663	JOKODOWSKY DITCH	1	43	SUGAR CK	54	NW	SW	4	9 N	87 W	S	1	1.0000	C	S,AB	06/22/1909	10/08/1908	07/15/1906	0	21465.20649	82A	81CW0116	3	0	0
44	663	JOKODOWSKY DITCH	1	43	SUGAR CK	54	NW	SW	4	9 N	87 W	S	1	1.0000	C	S	06/22/1909	10/08/1908	07/15/1906	0	21465.20649	82A		1	0	0
44	2108	TORISO CREEK WSP	0	22	TORISO CK	54	NW	NW	6	9 N	86 W	S	1	1.0000	C	S	12/31/1977	12/31/1976	09/23/1977	0	46552.00000	W1343-77	1	0	0	
44	6031	VAN TASSEL WELL 1	2	66	TRIBUTARIES-ELKHEAD CK	41	NE	NE	36	7 N	90 W	S	69	0.0180	C	O	12/31/1974	06/20/1919	0	25372.00000	W0391-72	1	0	0		
44	6037	HUDACK WELL NO 1	2	66	TRIBUTARIES-ELKHEAD CK	41	NE	SE	3	7 N	90 W	S	18	0.0330	C	O	12/31/1974	06/20/1919	0	25372.00000	W0747-74	1	0	0		
44	6082	VAN TASSEL WELL 2	2	66	TRIBUTARIES-ELKHEAD CK	41	SE	SE	25	7 N	89 W	S	69	0.0180	C	O	12/31/1972	09/01/1947	0	35672.00000	W0291-72	1	0	0		
44	6083	VAN TASSEL WELL 3	2	66	TRIBUTARIES-ELKHEAD CK	41	NE	SE	25	7 N	90 W	S	69	0.0180	C	O	12/31/1972	09/15/1947	0	35686.00000	W0291-72	1	0	0		
44	6084	VAN TASSEL WELL 4	2	66	TRIBUTARIES-ELKHEAD CK	54	NE	SE	30	7 N	89 W	S	69	0.0900	C	O	12/31/1972	07/01/1962	0	37437.00000	W0291-72	1	0	0		
44	6086	VAN TASSEL WELL 6	2	66	TRIBUTARIES-ELKHEAD CK	41	NE	SW	25	7 N	90 W	S	69	0.0180	C	O	12/31/1972	07/01/1954	0	38167.00000	W0293-72	1	0	0		
44	6085	VAN TASSEL WELL 5	2	66	TRIBUTARIES-ELKHEAD CK	41	NE	SW	25	7 N	90 W	S	69	0.0180	C	O	12/31/1972	07/01/1963	0	41454.00000	W0293-72	1	0	0		
44	6111	JOHN BRYANT WELL	2	66	TRIBUTARIES-ELKHEAD CK	41	SW	NW	9	7 N	89 W	S	8	0.0330	C	O	12/31/1980	06/14/1968	0	43264.00000	80CW0183	1	0	0		
44	1034	CARNS SPG NO 3	4	66	TRIBUTARIES-ELKHEAD CK	54	SW	SW	4	7 N	88 W	S	9	0.0400	C	O	12/31/1972	12/31/1971	06/01/1948	0	44559.35946	W0184-72	1	0	0	
44	1076	HUDACK SPG NO 4	4	66	TRIBUTARIES-ELKHEAD CK	41	NE	NE	7	7 N	89 W	S	690	0.0110	C	S	12/31/1974	12/31/1973	07/01/1930	0	45290.29401	W0745-74	1	0	0	
44	1076	HUDACK SPG NO 3	4	66	TRIBUTARIES-ELKHEAD CK	41	SE	NE	7	7 N	89 W	S	690	0.0110	C	S	12/31/1974	12/31/1973	06/18/1951	0	45290.71968	W0745-74	1	0	0	
44	6115	MAUBURG WELL	2	66	TRIBUTARIES-ELKHEAD CK	41	NW	NE	9	7 N	89 W	S	6	0.0330	C	O	12/31/1976	05/23/1974	0	45433.00000	80CW0188	1	0	0		
44	6023	ELKHEAD DOMESTIC WELL	2	66	TRIBUTARIES-ELKHEAD CK	41	NE	SW	16	7 N	89 W	S	8	0.0110	C	O	12/31/1975	10/02/1974	0	45456.00000	W0930-75	1	0	0		
44	2039	FUNK SPG NO 1	4	66	TRIBUTARIES-ELKHEAD CK	54	SW	NW	14	7 N	89 W	S	189	0.0400	C	S	12/31/1977	12/31/1976	07/01/1920	0	46386.25748	W1169-77	1	0	0	
44	846	MOORE SPG #1	4	66	TRIBUTARIES-ELKHEAD CK	54	SE	SE	6	7 N	88 W	S	9	0.0400	C	S	12/31/1977	12/31/1976	07/15/1977	0	46582.00000	W1217-77	1	0	0	
44	2040	FUNK SPG NO 2	4	66	TRIBUTARIES-ELKHEAD CK	54	NW	NW	14	7 N	89 W	S	69	0.0300	C	S.C	12/31/1977	12/31/1976	07/26/1977	0	46593.00000	W1169-77	1	0	0	
44	2040	FUNK SPG NO 2	4	66	TRIBUTARIES-ELKHEAD CK	54	NW	NW	14	7 N	89 W	S	69	0.0300	C	S,C,AB	12/31/1977	12/31/1976	07/26/1977	0	46593.00000	W1169-77	2	0	0	
44	2058	BOWER SPG	4	66	TRIBUTARIES-ELKHEAD CK	54	NE	SE	6	7 N	88 W	S	691	0.0330	C	S	12/31/1979	12/31/1978	07/25/1910	0	47116.22120	79CW0119	1	0	0	
44	2089	JACK SPG 3	4	66	TRIBUTARIES-ELKHEAD CK	54	NW	SW	23	7 N	89 W	S	69	0.0330	C	S	12/31/1979	12/31/1978	07/18/1978	0	47116.46950	79CW0161	1	0	0	
44	6160	HOLLOWAY WELL	2	66	TRIBUTARIES-ELKHEAD CK	54	NE	NW	29	7 N	88 W	S	8	0.0270	C	O	12/31/1980	08/07/1979	0	47335.00000	80CW0228	1	0	0		
44	4238	CARNS RES	3	66	TRIBUTARIES-ELKHEAD CK	54	SW	SW	4	7 N	88 W	S	X	4.0000	A	S	12/31/1980	12/31/1979	08/10/1965	0	47481.42225	80CW0178	1	0	0	
44	2109	YARD SPG	4	66	TRIBUTARIES-ELKHEAD CK	41	NE	NW	20	7 N	89 W	S	198	0.0300	C	S	12/31/1980	12/31/1979	07/14/1980	0	47677.00000	80CW0114	1	0	0	
44	4437	KITCHENS & KLECKNER RES	3	66	TRIBUTARIES-ELKHEAD CK	54	NW	SW	34	8 N	88 W	S	49	3.0000	A	S	12/31/1981	12/31/1980	08/01/1982	0	47847.13035	81CW0098	1	0	0	
44	2370	CANFIELD SPG	4	66	TRIBUTARIES-ELKHEAD CK	54	SW	NW	30	7 N	88 W	S	189	0.0110	C	S	12/31/1981	12/31/1980	07/01/1961	0	47847.40724	81CW0023	1	0	0	
44	4438	KARO DIVERSION & RES	3	66	TRIBUTARIES-ELKHEAD CK	41	NE	SW	20	7 N	89 W	S	49	1.0000	A	S	12/31/1981	12/31/1980	06/16/1981	0	48014.00000	81CW0126	1	0	0	
44	2166	FREDRICKSON SPG NO 1	4	66	TRIBUTARIES-ELKHEAD CK	54	NE	NE	15	7 N	89 W	S	69	0.0330	C	S	12/31/1981	12/31/1980	10/12/1981	0	48132.00000	81CW0251	1	0	0	
44	2167	FREDRICKSON SPG NO 2	4	66	TRIBUTARIES-ELKHEAD CK	54	NE	NE	15	7 N	89 W	S	69	0.0330	C	S	12/									

44	3852 TWO BAR RES 124	3	66	TRIBUTARIES-ELKHEAD CK	54	NE	NE	7	N	8	N	8	W	S	9	1.0000	A	S	12/31/1983	12/31/1982	08/20/1969	0	48577.43698	83COW1070	1	0	0
44	3853 TWO BAR RES 125	3	66	TRIBUTARIES-ELKHEAD CK	54	SW	SE	6	N	N	8	W	S	9	1.0000	A	S	12/31/1983	12/31/1982	09/01/1969	0	48577.43708	83COW1070	1	0	0	
44	3854 TWO BAR RES 126	3	66	TRIBUTARIES-ELKHEAD CK	54	SE	SW	6	N	N	8	W	S	9	1.0000	A	S	12/31/1983	12/31/1982	09/10/1969	0	48577.43717	83COW1070	1	0	0	
44	3855 TWO BAR RES 128	3	66	TRIBUTARIES-ELKHEAD CK	54	NW	SE	6	N	N	8	W	S	9	2.0000	A	S	12/31/1983	12/31/1982	09/15/1969	0	48577.43727	83COW1070	1	0	0	
44	3857 TWO BAR RES 129	3	66	TRIBUTARIES-ELKHEAD CK	54	NW	SE	6	N	N	8	W	S	9	1.0000	A	S	12/31/1983	12/31/1982	09/20/1969	0	48577.43727	83COW1070	1	0	0	
44	3858 TWO BAR RES 130	3	66	TRIBUTARIES-ELKHEAD CK	54	SE	NW	6	N	N	8	W	S	9	1.0000	A	S	12/31/1983	12/31/1982	10/01/1969	0	48577.43738	83COW1070	1	0	0	
44	3855 TWO BAR RES 127	3	66	TRIBUTARIES-ELKHEAD CK	54	SE	SW	6	N	N	8	W	S	9	0.2500	A	S	12/31/1983	12/31/1982	09/10/1974	0	48577.45543	83COW1070	1	0	0	
44	3787 TWO BAR BLM RES 35	3	66	TRIBUTARIES-ELKHEAD CK	54	SW	SW	6	N	N	8	W	S	9	0.5000	A	S	12/31/1983	12/31/1982	07/10/1975	0	48577.45544	83COW1074	1	0	0	
44	3789 TWO BAR BLM RES 37	3	66	TRIBUTARIES-ELKHEAD CK	54	SW	SW	6	N	N	8	W	S	9	1.0000	A	S	12/31/1983	12/31/1982	07/15/1975	0	48577.45551	83COW1074	1	0	0	
44	3791 TWO BAR BLM RES 38	3	66	TRIBUTARIES-ELKHEAD CK	54	SW	SW	6	N	N	8	W	S	9	1.0000	A	S	12/31/1983	12/31/1982	07/20/1975	0	48577.45586	83COW1074	1	0	0	
44	1192 MANY DAM SPRING	4	66	TRIBUTARIES-ELKHEAD CK	54	NW	NW	32	N	N	8	W	S	9	0.0010	C	S	12/31/1983	12/31/1982	09/30/1982	0	48577.48485	83COW1027	1	0	0	
44	2389 FREDRICKSON SPG NO 4	4	66	TRIBUTARIES-ELKHEAD CK	54	SE	NE	15	7	N	8	W	S	9	0.0300	C	S	12/31/1984	12/31/1983	09/23/1979	0	48942.47382	84COW0051	1	0	0	
44	2388 FREDRICKSON SPG NO 3	4	66	TRIBUTARIES-ELKHEAD CK	54	SE	NE	15	7	N	8	W	S	9	0.0300	C	S	12/31/1984	12/31/1983	10/10/1983	0	48942.48921	84COW0051	1	0	0	
44	2378 COFFEE SPRING 1	4	66	TRIBUTARIES-ELKHEAD CK	54	NE	NW	5	N	N	8	W	S	9	0.0100	C	S.C	12/31/1984	12/31/1983	01/24/1984	0	48966.00000	84COW0004	1	0	0	
44	2378 COFFEE SPRING 1	4	66	TRIBUTARIES-ELKHEAD CK	54	NE	NW	5	N	N	8	W	S	9	0.0110	C	S.C,AB	12/31/1984	12/31/1983	01/24/1984	0	48966.00000	84COW0004	2	0	DILIGENCE 87CWS84C3W31. ABANDONED 01LCS 10192000	
44	1205 TRACEY SPRING 1	4	66	TRIBUTARIES-ELKHEAD CK	54	SE	SE	20	N	N	8	W	S	9	0.0200	C	S	12/31/1988	12/31/1987	05/01/1986	0	50403.20574	88COW0002	1	0	0	
44	1206 TRACEY SPRING 2	4	66	TRIBUTARIES-ELKHEAD CK	54	SE	SE	20	N	N	8	W	S	9	0.0200	C	S	12/31/1988	12/31/1987	08/30/1987	0	50403.50286	88COW0002	1	0	0	
44	1204 TRACEY SPRING 3	4	66	TRIBUTARIES-ELKHEAD CK	54	SE	NW	20	N	N	8	W	S	9	0.0110	C	S	12/31/1988	12/31/1987	09/30/1987	0	50403.50311	88COW0002	1	0	0	
44	1363 PANKEY NO 1 D & LIV DIVR	1	66	TRIBUTARIES-ELKHEAD CK	41	NW	SE	19	7	N	8	W	S	9	0.0300	C	S	12/31/1990	12/31/1989	11/14/1990	0	51452.00000	90COW1015	1	0	0	
44	1363 PANKEY NO 1 D & LIV DIVR	1	66	TRIBUTARIES-ELKHEAD CK	41	NW	SE	19	7	N	8	W	S	9	1.0000	C	S.C	12/31/1990	12/31/1989	11/14/1990	0	51452.00000	90COW1015	2	0	0	
44	1363 PANKEY NO 1 D & LIV DIVR	1	66	TRIBUTARIES-ELKHEAD CK	41	NW	SE	19	7	N	8	W	S	9	1.0000	C	S.C,AB	12/31/1990	12/31/1989	11/14/1990	0	51452.00000	90COW1015	3	0	ABAND 1 CFS 81/297.	
44	1277 ZULIAN SPRING	4	66	TRIBUTARIES-ELKHEAD CK	41	SW	NE	9	7	N	8	W	S	9	0.0300	C	S	12/31/1991	12/31/1990	06/10/1991	0	51660.00000	91COW0056	1	0	0	
44	1415 ZULIAN SPRING NO 2	66	TRIBUTARIES-ELKHEAD CK	41	NE	SW	9	7	N	8	W	S	9	0.0100	C	S	12/31/1993	12/31/1992	08/01/1993	0	52443.00000	93COW0070	1	0	0		
44	4202 PEED RESERVOIR #1	3	66	TRIBUTARIES-ELKHEAD CK	41	SW	SE	8	7	N	8	W	S	9	1.0000	A	S	12/31/1995	12/31/1994	04/15/1957	0	52960.39186	95COW0076	1	0	0	
44	1727 BULL GULCH SPRING	4	66	TRIBUTARIES-ELKHEAD CK	54	NW	NW	19	N	N	8	W	S	9	0.0100	C	S	12/31/1995	12/31/1994	06/01/1963	0	52960.41424	95COW0089	1	0	0	
44	1728 FERGUSON SPRING	4	66	TRIBUTARIES-ELKHEAD CK	54	NE	SE	13	N	N	8	W	S	9	0.0100	C	S	12/31/1995	12/31/1994	06/01/1963	0	52960.41424	95COW0089	1	0	0	
44	1729 FULTON SPRING # 8	4	66	TRIBUTARIES-ELKHEAD CK	54	SW	SE	12	N	N	8	W	S	9	0.0100	C	S	12/31/1995	12/31/1994	06/01/1963	0	52960.41424	95COW0089	1	0	0	
44	1738 FULTON SPRING # 9	4	66	TRIBUTARIES-ELKHEAD CK	54	NE	SW	7	N	N	8	W	S	9	0.0100	C	S	12/31/1995	12/31/1994	06/01/1963	0	52960.41424	95COW0089	1	0	0	
44	4203 PEED RESERVOIR #2	3	66	TRIBUTARIES-ELKHEAD CK	41	NW	SE	9	7	N	8	W	S	9	0.2500	A	S	12/31/1995	12/31/1994	01/15/1975	0	52960.45769	95COW0076	1	0	A	
44	4205 PEED RESERVOIR #4	3	66	TRIBUTARIES-ELKHEAD CK	41	SE	NW	8	7	N	8	W	S	9	0.2500	A	S	12/31/1995	12/31/1994	05/10/1975	0	52960.45784	95COW0076	1	0	0	
44	4206 PEED RESERVOIR #5	3	66	TRIBUTARIES-ELKHEAD CK	41	NE	NW	8	7	N	8	W	S	9	0.5000	A	S	12/31/1995	12/31/1994	05/10/1975	0	52960.45786	95COW0076	1	0	0	
44	1732 KARO #3 SPRING AND DITCH	1	66	TRIBUTARIES-ELKHEAD CK	41	NE	SW	20	7	N	8	W	S	9	0.0300	C	S	12/31/1995	12/31/1994	11/15/1981	0	52960.48166	95COW1051	1	0	0	
44	4204 PEED RESERVOIR #3	3	66	TRIBUTARIES-ELKHEAD CK	41	SW	NE	8	7	N	8	W	S	9	0.2500	A	S	12/31/1995	12/31/1994	04/15/1988	0	52960.50509	95COW0076	1	0	0	
44	1720 DAVENPORT SPRING #1	4	66	TRIBUTARIES-ELKHEAD CK	41	NE	SE	17	7	N	8	W	S	9	0.0300	C	S	12/31/1995	12/31/1994	12/28/1994	0	52960.52957	95COW0005	1	0	0	
44	1721 DAVENPORT SPRING #2	4	66	TRIBUTARIES-ELKHEAD CK	41	NE	SW	9	7	N	8	W	S	9	0.0300	C	S	12/31/1995	12/31/1994	12/28/1994	0	52960.52957	95COW0005	1	0	0	
44	1722 DAVENPORT SPRING #3	4	66	TRIBUTARIES-ELKHEAD CK	41	NE	SW	17	7	N	8	W	S	9	0.0300	C	S	12/31/1995	12/31/1994	12/28/1994	0	52960.52957	95COW0005	1	0	0	
44	1723 DAVENPORT SPRING #4	4	66	TRIBUTARIES-ELKHEAD CK	41	SW	NW	17	7	N	8	W	S	9	0.0300	C	S	12/31/1995	12/31/1994	12/28/1994	0	52960.52957	95COW0005	1	0	0	
44	1724 DAVENPORT SPRING #5	4	66	TRIBUTARIES-ELKHEAD CK	41	SE	NE	18	7	N	8	W	S	9	0.0300	C	S	12/31/1995	12/31/1994	12/28/1994	0	52960.52957	95COW0005	1	0	0	
44	1725 DAVENPORT SPRING #6	4	66	TRIBUTARIES-ELKHEAD CK	41	SW	SE	18	7	N	8	W	S	9	0.0300	C	S	12/31/1995	12/31/1994	12/28/1994	0	52960.52957	95COW0005	1	0	0	
44	1726 DAVENPORT SPRING #7	4	66	TRIBUTARIES-ELKHEAD CK	41	SE	NW	20	7	N	8	W	S	9	0.0300	C	S	12/31/1995	12/31/1994	12/28/1994	0	52960.52957	95COW0005	1	0	0	
44	1338 BEAVER POND SPRING	4	66	TRIBUTARIES-ELKHEAD CK	41	NE	SW	13	N	N	8	W	S	9	0.0300	C	S	12/31/1996	12/31/1995	07/01/1974	0	53325.45472	96COW0060	1	0	0	
44	1366 CENTENNIAL SPRING	4	66	TRIBUTARIES-ELKHEAD CK	54	NE	NW	21	N	N	8	W	S	9	0.0300	C	S	12/31/1996	12/31/1995	07/01/1974	0	53325.45472	96COW0060	1	0	0	
44	1343 RUNNING ELK SPRING	4	66	TRIBUTARIES-ELKHEAD CK	41	NW	NW	2	N	N	8	W	S	9	0.0300	C	S	12/31/1996	12/31/1995	07/01/1974	0	53325.45472	96COW0060	1	0	0	
44	1363 TEQUILA SPRING	4	66	TRIBUTARIES-ELKHEAD CK	54	NW	SW	16	N	N	8	W	S	9	0.1000	C	S	12/31/1996	12/31/1995	07/01/1974	0	53325.45472	96COW0057	1	0	COND FOR USE 1	
44	1364 SOUTH MESA SPRING NO 1	4	66	TRIBUTARIES-ELKHEAD CK	54	SE	SW	21	N	N	8	W	S	9	0.0300	C	S	12/31/1996	12/31/1995	07/15/1994	0	53325.52791	96COW0057	1	0	0	
44	1365 SOUTH MESA SPRING NO 2	4	66	TRIBUTARIES-ELKHEAD CK	54	SW	SW	21	N	N	8	W	S	9	0.0300	C	S	12/31/1996	12/31/1995	07/15/1994	0	53325.52791	96COW0057	1	0	0	
44	1367 WEST MESA SPRING	4	66	TRIBUTARIES-ELKHEAD CK	54	SW	SE	17	N	N	8	W	S	9	0.0300	C	S	12/31/1996	12/31/1995	07/15/1994	0	53325.52791	96COW0057	1	0	0	
44	4366 LAMBING GROUND PLACE #2	3	66	TRIBUTARIES-ELKHEAD CK	41	NE	NW	24	7	N	8	W	S	9	0.2500	A	S	12/31/1997	12/31/1996	06/05/1937	0	53691.21932	97COW0040	1	0	0	
44	4365 LAMBING GROUND PLACE #1	3	66	TRIBUTARIES-ELKHEAD CK	41	SE	NE	24	7	N	8	W	S	9	0.5000	A	S	12/31/1997	12/31/1996	06/10/1937	0	53691.21937	97COW0040	1	0	0	
44	4360 HEADGE PLACE #2	3	66	TRIBUTARIES-ELKHEAD CK	41	SE	NE	13	7	N	8	W	S	9	1.0000	A	S	12/31/1997	12/31/1996	06/25/1938	0	53691.32317	97COW0040	1	0	0	
44	4361 HEADGE PLACE #3	3	66	TRIBUTARIES-ELKHEAD CK	41	NW	SE	13	7	N	8	W	S	9	0.5000	A	S	12/31/1997	12/31/1996	07/05/1938	0	53691.32327	97COW0040	1	0	0	
44	4362 HEADGE PLACE #4	3	66	TRIBUTARIES-ELKHEAD CK	41	NW	SE	13	7	N	8	W	S	9	0.5000	A	S	12/31/1997	12/31/1996	07/10/1938	0	53691.32332	97COW0040	1	0	0	
44	4363 HEADGE PLACE #5	3	66	TRIBUTARIES-ELKHEAD CK	41	NE	SW	13	7	N	8	W	S	9	0.5000	A	S	12/31/1997	12/31/1								

44	1962	FRENTRESS PUMP NO. 1	8	66	TRIBUTARIES-ELKHEAD CK	41	SW	SE	20	7 N	89 W	S	19	2.0000	C	S	12/31/2000	12/31/1999	07/10/2000	0	54978.00000		00CW0029	1		0	ALT PT AT ID803
44	803	FRENTRESS PUMP NO. 1 AP	8	66	TRIBUTARIES-ELKHEAD CK	41	SE	SW	20	7 N	89 W	S	19	2.0000	C	S AP	12/31/2000	12/31/1999	07/10/2000	0	54978.00000		00CW0029	1		4401962	ALP PT FOR ID1962
44	4524	PEED RESERVOIR #6	3	66	TRIBUTARIES-ELKHEAD CK	41	NW	NE	17	7 N	89 W	S	9	0.5000	A	S	12/31/2000	12/31/1999	07/28/2000	0	54996.00000		00CW0032	1		0	
44	4526	PEED RESERVOIR #7	3	66	TRIBUTARIES-ELKHEAD CK	41	NW	SE	8	7 N	89 W	S	9	1.0000	A	S	12/31/2000	12/31/1899	07/28/2000	0	54996.00000		00CW0032	1		0	
44	2335	STINSON SPRING	4	66	TRIBUTARIES-ELKHEAD CK	54	SW	SE	20	8 N	88 W	S	169W	0.0110	C	S	12/31/2001	12/31/2000	06/01/2000	0	95152.54039		01CW0095	1		0	



















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