APPLICATION FOR ALLOCATION AND USE OF CONSERVED WATER

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Exhibit A

SCID Affidavit Authorizing OWT to File Application

AFFIDAVIT

STATE OF OREGON)
)ss
County of Deschutes)

I, Marc Thalacker, being first duly sworn, hereby depose and swear to the following:

1. I am the manager of the Squaw Creek Irrigation District (SCID), which is responsible for the management and delivery of the water described under water rights certificate 74135. Water rights certificate 74135 is issued in the name of the SCID.
2. In my position as manager of the SCID, I have administrative responsibility for the day-to-day operations of the SCID.
3. The SCID Board of Directors, by a vote taken on February 1, 2000, authorized entering into a contract with the Deschutes Basin Resource Conservancy to obtain funding for the construction of the Cloverdale Ditch Pipeline Project. One key provision of that contract is that SCID agree to have OWT prepare and file an application to put 3.0 cfs or 50% of the conserved water (whichever is greater) through the State's conserved water project to be transferred to legally protected instream flows.
4. I hereby authorize OWT to file the conserved water application for the Cloverdale Ditch Pipeline Project on behalf of the SCID.

IN WITNESS WHEREOF, I hereunto set my hand this 15 day of February, 2001.

By: Marc Thalacker
Marc Thalacker
Squaw Creek Irrigation District
68000 Hwy 20 W.
Sisters, OR 97759

This instrument was subscribed and sworn before me on this 15 day of February, 2001, by Marc Thalacker.

Joyce G. Burdick
NOTARY PUBLIC FOR OREGON
My Commission Expires:

OFFICIAL SEAL
JOYCE G BURDICK
NOTARY PUBLIC - OREGON
COMMISSION NO. 304872
MY COMMISSION EXPIRES SEP. 17, 2001

AFFIDAVIT

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COMMISSION NO. 304872
MY COMMISSION EXPIRES SEP. 17, 2001

Exhibit B

Water Right Certificate

STATE OF OREGON

COUNTY OF DESCHUTES

CERTIFICATE OF WATER RIGHT

THIS CERTIFICATE ISSUED TO

SQUAW CREEK IRRIGATION DISTRICT
PO BOX 2230
SISTERS, OREGON 97759

confirms the right to use the waters of SQUAW CREEK, a tributary of THE DESCHUTES RIVER, for IRRIGATING 7,567.76 ACRES, POND MAINTENANCE, INDUSTRIAL USE, AND STOCK WATER.

This right was confirmed by decree of the Circuit Court of the State of Oregon for CROOK County. The decree is of record at Salem, in the Order Record of the WATER RESOURCES DIRECTOR, in Volume 1, at Pages 121, 122, 123, 124, 435, 438, 445, 472, and 473. The dates of priority are 1869, 1885, 1887, 1889, 1893, 1895, 1899, 1900, 1901, 1903, and 1904.

The amount of water to which this right is entitled is limited to an amount actually beneficially used and shall not exceed 153.02 CUBIC FEET PER SECOND, BEING 151.35 CFS FOR IRRIGATION, 1.57 CFS FOR POND MAINTENANCE AND 0.10 CFS FOR INDUSTRIAL USE, or its equivalent in case of rotation, measured at the point of diversion from the source. The maximum diversion rate by priority date is:

Priority	Acres (equivalent)	Maximum CFS
1869	48.00	0.96
1885	79.05	1.58
1887	150.00	3.00
1889	201.50	4.03
1893	39.50	0.79
1895	5716.75	114.34
1899	108.80	2.18
1900	54.00	1.08
1901	22.30	0.45
1903	360.60	7.21
1904	870.60	17.41

The point of diversion is located as follows:

SW¼ SW¼, SECTION 21, T. 15 S., R. 10 E., W.M.; 998 FEET NORTH AND 1211 FEET EAST FROM THE SW CORNER OF SECTION 21.

The amount of water used for irrigation, together with the amount secured under any other right existing for the same lands, is limited to ONE- FIFTIETH of one cubic foot per second per acre, or its equivalent for each acre irrigated during the irrigation season of each year.

A description of the place of use to which this right is appurtenant is as follows:

SEE NEXT PAGE

Lot	qQ	Tax lot	Acres	Type	Priority	Owner
	SE¼ SE¼	1300	34.00	IRR	1904	Cooper, Glenn
			Section 19			
	SW¼ NE¼	1401	17.50	IRR	1895	Cooper, Glenn
	SW¼ NE¼	1401	23.50	IRR	1904	Cooper, Glenn
	SE¼ NE¼	1401	8.50	IRR	1904	Cooper, Glenn
	NE¼ NW¼	1401	22.00	IRR	1904	Cooper, Glenn
	SW¼ NW¼	1401	8.50	IRR	1904	Cooper, Glenn
	SE¼ NW¼	1401	17.00	IRR	1895	Cooper, Glenn
	SE¼ NW¼	1401	23.00	IRR	1904	Cooper, Glenn
	NW¼ SW¼	1401	18.00	IRR	1904	Cooper, Glenn
	NW¼ SW¼	1401	4.00	POND	1904	Cooper, Glenn
	SW¼ SW¼	1401	30.00	IRR	1904	Cooper, Glenn
	NE¼ SE¼	1401	4.00	IRR	1904	Cooper, Glenn
	NW¼ SE¼	1401	6.00	IRR	1904	Cooper, Glenn
			Section 20			
	NW¼ NW¼	1401	39.00	IRR	1895	Cooper, Glenn
	SW¼ NW¼	1900	37.00	IRR	1895	Mulkey, David & Phyllis
	NW¼ SW¼	1900	21.00	IRR	1895	Mulkey, David & Phyllis
	NW¼ SW¼	1900	8.00	IRR	1899	Mulkey, David & Phyllis
	NW¼ SW¼	1900	11.00	IRR	1904	Mulkey, David & Phyllis
	SW¼ SW¼	2000	16.00	IRR	1895	Kidson, Don
			Section 29			
	NE¼ NE¼	1401	11.00	IRR	1895	Cooper, Glenn
	NE¼ NE¼	1401	30.00	IRR	1904	Cooper, Glenn
	SW¼ NE¼	1900	2.00	IRR	1895	Mulkey, David & Phyllis
	SW¼ NE¼	1900	14.00	IRR	1904	Mulkey, David & Phyllis
	SE¼ NE¼	1900	38.00	IRR	1895	Mulkey, David & Phyllis
	SE¼ NE¼	1900	1.00	POND	1895	Mulkey, David & Phyllis
	NE¼ SE¼	1900	40.00	IRR	1904	Mulkey, David & Phyllis
	NW¼ SE¼	1900	20.00	IRR	1904	Mulkey, David & Phyllis
	SW¼ SE¼	2000	6.00	IRR	1895	Kidson, Don
	SW¼ SE¼	2000	0.50	POND	1895	Kidson, Don
	SE¼ SE¼	2000	9.00	IRR	1895	Kidson, Don
	SE¼ SE¼	2000	5.00	IRR	1904	Kidson, Don
			Section 30			
	NE¼ NE¼	2000	9.00	IRR	1895	Kidson, Don
	NW¼ NE¼	2000	6.00	IRR	1895	Kidson, Don
	SW¼ NE¼	2000	8.00	IRR	1895	Kidson, Don
	SE¼ NE¼	2000	13.50	IRR	1895	Kidson, Don
	NE¼ SW¼	2100	3.50	IRR	1895	Page, Richard
	SE¼ SW¼	2100	25.00	IRR	1895	Page, Richard
			Section 31			
	NW¼ NW¼	2000	1.00	IRR	1895	Kidson, Don
			Section 32			
			Township 13 South, Range 12 East, W.M.			
	SW¼ NE¼	2400	2.50	IRR	1895	Hurtley, David & Judy
	NE¼ SE¼	200	2.00	IRR	1895	Hurtley, David & Judy
	NE¼ SE¼	800	1.50	IRR	1895	Hurtley, David & Judy
	NE¼ SE¼	900	1.50	IRR	1895	Hurtley, David & Judy
	NW¼ SE¼	2000	2.50	IRR	1895	Hurtley, David & Judy
	NW¼ SE¼	2400	1.50	IRR	1895	Hurtley, David & Judy
	NW¼ SE¼	500	2.00	IRR	1895	Hurtley, David & Judy
	NW¼ SE¼	600	4.00	IRR	1895	Hurtley, David & Judy
	SW¼ SE¼	1900	2.00	IRR	1895	Hurtley, David & Judy
	SW¼ SE¼	2000	1.50	IRR	1895	Hurtley, David & Judy
	SE¼ SE¼	2500	12.00	IRR	1895	Hurtley, David & Judy

Lot	qQ	Tax lot	Acres	Type	Priority	Owner
	SE¼ SE¼	2501	4.00	IRR	1895	Hurtley, David & Judy
	SE¼ SE¼	2502	5.00	IRR	1895	Hurtley, David & Judy
	SE¼ SE¼	2503	3.00	IRR	1895	Hurtley, David & Judy
	SE¼ SE¼	2504	4.00	IRR	1895	Hurtley, David & Judy
			Section 36			
			Township 14 South, Range 10 East, W.M.			
	NE¼ SW¼	101	5.00	IRR	1895	Long Hollow Ranch
	SW¼ SW¼	101	18.00	IRR	1895	Long Hollow Ranch
	SW¼ SW¼	101	4.00	IRR	1904	Long Hollow Ranch
	SE¼ SW¼	101	32.00	IRR	1895	Long Hollow Ranch
	SE¼ SW¼	101	2.00	IRR	1904	Long Hollow Ranch
	NW¼ SE¼	101	16.00	IRR	1895	Long Hollow Ranch
	SW¼ SE¼	101	36.50	IRR	1895	Long Hollow Ranch
	SE¼ SE¼	101	26.00	IRR	1895	Long Hollow Ranch
			Section 1			
	SE¼ SE¼	101	11.00	IRR	1895	Long Hollow Ranch
			Section 2			
	NE¼ NE¼	101	25.50	IRR	1895	Long Hollow Ranch
	NE¼ NE¼	101	1.00	IRR	1904	Long Hollow Ranch
	NW¼ NE¼	101	17.50	IRR	1895	Long Hollow Ranch
	NW¼ NE¼	101	2.50	IRR	1904	Long Hollow Ranch
	NE¼ NW¼	101	4.00	IRR	1895	Long Hollow Ranch
			Section 11			
	NE¼ NE¼	103	23.50	IRR	1895	Long Hollow Ranch
	NW¼ NE¼	103	8.50	IRR	1895	Long Hollow Ranch
	NW¼ NW¼	100	6.00	IRR	1895	Long Hollow Ranch
	NW¼ NW¼	100	3.00	IRR	1904	Long Hollow Ranch
			Section 12			
	NW¼ NE¼	200	5.00	IRR	1895	Simon, Jim
	SW¼ NE¼	300	0.68	IRR	1895	Friend, Chester & Pamela
	SE¼ NE¼	401	14.00	IRR	1895	Friend, Chester & Pamela
	NE¼ NW¼	200	19.50	IRR	1904	Simon, Jim
	SW¼ NW¼	500	13.50	IRR	1895	Simon, Jim
	SE¼ NW¼	500	5.50	IRR	1895	Simon, Jim
	NE¼ SW¼	500	8.00	IRR	1895	Simon, Jim
	NW¼ SW¼	500	33.00	IRR	1895	Simon, Jim
	SW¼ SW¼	700	21.50	IRR	1895	Kavanagh, Geraldine
	SW¼ SW¼	700	0.50	IRR	1904	Kavanagh, Geraldine
	SW¼ SW¼	800	4.00	IRR	1895	Kavanagh, Geraldine
	SE¼ SW¼	600	5.87	IRR	1895	Sanders, Ed & Betty
	NE¼ SE¼	401	37.00	IRR	1895	Friend, Chester & Pamela
	NW¼ SE¼	300	1.50	IRR	1895	Friend, Chester & Pamela
	SW¼ SE¼	400	22.00	IRR	1895	Sanders, Ed & Betty
	SE¼ SE¼	400	12.00	IRR	1895	Sanders, Ed & Betty
	SE¼ SE¼	401	12.00	IRR	1895	Friend, Chester & Pamela
			Section 13			
	SE¼ SE¼	700	3.50	IRR	1895	Kavanagh, Geraldine
	SE¼ SE¼	700	3.10	IRR	1904	Kavanagh, Geraldine
	SE¼ SE¼	800	2.00	IRR	1895	Kavanagh, Geraldine
			Section 14			
	NE¼ SW¼	600	2.10	IRR	1895	Elmore, Michael
	NE¼ SW¼	700	2.10	IRR	1895	Elmore, Michael
	SE¼ SW¼	600	2.90	IRR	1895	Elmore, Michael
	SE¼ SW¼	900	9.00	IRR	1895	Elmore, Michael
	NW¼ SE¼	700	2.90	IRR	1895	Elmore, Michael
			Section 22			

Lot	qQ	Tax lot	Acres	Type	Priority	Owner
	NE¼ NE¼	100	6.00	IRR	1895	Kavanagh, Geraldine
	NE¼ NE¼	100	1.50	IRR	1904	Kavanagh, Geraldine
	NE¼ NE¼	200	15.00	IRR	1895	Helikson, Paul & Sherry
	NE¼ NE¼	400	1.50	IRR	1895	Kavanagh, Geraldine
	SE¼ NE¼	300	19.80	IRR	1895	Helikson, Paul & Sherry
	SW¼ SW¼	1400	6.80	IRR	1899	Burdick, Robert R.
	SE¼ SW¼	1200	4.20	IRR	1895	Kelley, William & Mildred
	SE¼ SW¼	1300	7.50	IRR	1899	Burdick, Robert R.
	NE¼ SE¼	800	8.00	IRR	1895	Vestal, William & Victoria
	NW¼ SE¼	400	8.00	IRR	1895	Volz, Charles & Jan
	NW¼ SE¼	700	6.50	IRR	1895	Volz, Charles & Jan
	SW¼ SE¼	1000	1.80	IRR	1895	Shirazi, Mostafa & Naoko
	SW¼ SE¼	1100	5.00	IRR	1895	Burdick, Joyce G.
	SW¼ SE¼	1100	5.20	IRR	1899	Burdick, Joyce G.
			Section 23			
	NE¼ NE¼	100	2.70	IRR	1895	Sanders, Ed & Betty
	NW¼ NE¼	100	1.50	IRR	1895	Sanders, Ed & Betty
	NW¼ NW¼	400	6.00	IRR	1895	Kavanagh, Geraldine
	NW¼ NW¼	500	1.50	IRR	1895	Kavanagh, Geraldine
			Section 24			
	NW¼ NE¼	300	5.00	IRR	1895	Elmore, Michael
	NW¼ NE¼	400	4.00	IRR	1895	Elmore, Michael
			Section 27			
	SE¼ SW¼	500	6.00	IRR	1895	Jeffers, Donald & Gail
			Section 28			
	SE¼ SW¼	5800	8.00	IRR	1895	Paulus, Tom
	SW¼ SE¼	5802	3.00	IRR	1895	Wilson, Aaron & Helen
	SW¼ SE¼	5802	11.00	IRR	1904	Wilson, Aaron & Helen
			Section 29			
	NE¼ SW¼	4701	40.00	IRR	1899	Leason, Catherine
	SE¼ SW¼	4800	6.80	IRR	1895	Leason, John
	SE¼ SW¼	4800	19.60	IRR	1899	Leason, John
	NE¼ SE¼	4700	16.50	IRR	1895	Richardson, Reece & Lorene
	NE¼ SE¼	4700	0.50	POND	1895	Richardson, Reece & Lorene
	NE¼ SE¼	4704	3.00	IRR	1895	Richardson, Reece & Lorene
	SW¼ SE¼	4800	30.90	IRR	1895	Leason, John
	SW¼ SE¼	4800	8.60	IRR	1899	Leason, John
	SE¼ SE¼	4800	36.70	IRR	1895	Leason, John
			Section 30			
	NE¼ NE¼	4800	37.30	IRR	1895	Leason, John
	NW¼ NE¼	4800	40.00	IRR	1895	Leason, John
	SW¼ NE¼	4800	30.40	IRR	1895	Leason, John
	SE¼ NE¼	4800	31.90	IRR	1895	Leason, John
	NE¼ NW¼	4800	9.70	IRR	1895	Leason, John
	SE¼ NW¼	5200	0.70	IRR	1895	Leason, John
3	NW¼ SW¼	1000	4.00	IRR	1895	Hurtley, David & Judy
3	NW¼ SW¼	300	4.00	IRR	1895	Hurtley, David & Judy
3	NW¼ SW¼	500	3.00	IRR	1895	Hurtley, David & Judy
3	NW¼ SW¼	600	2.00	IRR	1895	Hurtley, David & Judy
3	NW¼ SW¼	700	4.00	IRR	1895	Hurtley, David & Judy
3	NW¼ SW¼	800	2.50	IRR	1895	Hurtley, David & Judy
3	NW¼ SW¼	900	2.00	IRR	1895	Hurtley, David & Judy
4	SW¼ SW¼	200	22.00	IRR	1895	Hurtley, David & Judy
4	SW¼ SW¼	201	6.00	IRR	1895	Hurtley, David & Judy
	NE¼ SE¼	5300	36.60	IRR	1895	Leason, John
	NW¼ SE¼	5300	16.10	IRR	1895	Leason, John

Lot	qQ	Tax lot	Acres	Type	Priority	Owner
	NW¼ SE¼	5300	1.60	IRR	1899	Leason, John
	SW¼ SE¼	5400	12.20	IRR	1895	Leason, John
	SE¼ SE¼	5500	39.10	IRR	1895	Leason, John
			Section 31			
	NE¼ NE¼	100	29.00	IRR	1895	Longley, Tom
	NW¼ NE¼	100	32.50	IRR	1895	Longley, Tom
	SW¼ NE¼	100	7.00	IRR	1895	Longley, Tom
	SE¼ NE¼	100	11.00	IRR	1895	Longley, Tom
	SW¼ SW¼	1200	16.00	IRR	1895	King, Robert & Nancy
	SE¼ SE¼	1700	6.00	IRR	1895	Hicks, John & Barbara
	SE¼ SE¼	1701	12.50	IRR	1895	Russell, Gordon
	SE¼ SE¼	1702	1.50	IRR	1895	Hicks, John & Barbara
			Section 32			
	NW¼ NW¼	400	20.00	IRR	1895	Longley, Tom
	NW¼ NW¼	400	1.00	POND	1895	Longley, Tom
	SE¼ NW¼	500	5.00	IND	1904	S.C.I.D., Mac. Pond
	NE¼ SW¼	3600	8.50	IRR	1895	Carmell, John P. & Ramona J
	NE¼ SW¼	3600	0.50	POND	1895	Carmell, John P. & Ramona J
	NW¼ SW¼	1300	2.50	IRR	1895	Nicholson, Brad & Molly
	SW¼ SW¼	1300	0.50	IRR	1895	Nicholson, Brad & Molly
	SW¼ SW¼	1400	7.00	IRR	1895	Johnson, Don
	SW¼ SW¼	1500	5.00	IRR	1895	Mason, Don R. & Willadean
	SW¼ SW¼	1600	8.00	IRR	1895	Johnson, Don
	SW¼ SW¼	1700	6.00	IRR	1895	Stephenson, Robert & Patricia
	SW¼ SW¼	3500	1.00	IRR	1895	Jewett, Daniel & Jeanne
	SE¼ SW¼	1700	1.00	IRR	1895	Stephenson, Robert & Patricia
	SE¼ SW¼	1800	5.00	IRR	1895	Sage, L. Gordon & Linda
	SE¼ SW¼	3500	4.00	IRR	1895	Jewett, Daniel & Jeanne
	NW¼ SE¼	500	9.10	POND	1895	S.C.I.D., Mac. Pond
	SE¼ SE¼	2400	8.00	IRR	1895	McCullough, William & Shirly
	SE¼ SE¼	2500	7.50	IRR	1895	Gerland, Jacqueline
	SE¼ SE¼	2600	7.50	IRR	1895	Gerland, Jacqueline
			Section 33			
			Township 14 South, Range 11 East, W.M.			
1	NE¼ NE¼	800	15.50	IRR	1895	Williams, Don & Myrtle
2	NW¼ NE¼	800	27.00	IRR	1895	Williams, Don & Myrtle
	SW¼ NE¼	800	25.00	IRR	1895	Williams, Don & Myrtle
	SE¼ NE¼	800	10.00	IRR	1895	Williams, Don & Myrtle
3	NE¼ NW¼		10.50	IRR	1895	Williams, Don & Myrtle
	SE¼ NW¼	800	7.00	IRR	1895	Williams, Don & Myrtle
			Section 5			
3	NE¼ NW¼	902	40.00	IRR	1895	Page, Richard
	SE¼ NW¼	902	1.50	IRR	1895	Page, Richard
	SE¼ NW¼	902	6.00	IRR	1904	Page, Richard
	NE¼ SW¼	900	5.00	IRR	1895	Wallace, Al
6	NW¼ SW¼	1000	2.50	IRR	1895	Wallace, Al
6	NW¼ SW¼	1000	6.00	IRR	1904	Wallace, Al
7	SW¼ SW¼	1000	35.00	IRR	1895	Wallace, Al
7	SW¼ SW¼	1000	5.00	IRR	1904	Wallace, Al
	SE¼ SW¼	900	25.50	IRR	1895	Wallace, Al
	SE¼ SW¼	900	6.00	IRR	1904	Wallace, Al
	SW¼ SE¼	800	18.00	IRR	1895	Williams, Don & Myrtle
			Section 6			
	NW¼ NE¼	800	11.00	IRR	1895	Williams, Don & Myrtle
	NW¼ NE¼	800	11.50	IRR	1899	Williams, Don & Myrtle
	NE¼ NW¼	999	17.50	IRR	1895	Wallace, Al
1	NW¼ NW¼	1000	31.00	IRR	1895	Wallace, Al

Lot	qQ	Tax lot	Acres	Type	Priority	Owner
1	NW¼ NW¼	1000	0.50	POND	1895	Wallace, Al
	SE¼ NW¼	1199	27.00	IRR	1895	Lawrence, David & Chris
4	SW¼ SW¼	1102	6.00	IRR	1895	Powers, Sherode & Susan
	SE¼ SW¼	1102	2.50	IRR	1895	Powers, Sherode & Susan
	SE¼ SW¼	1102	2.50	POND	1895	Powers, Sherode & Susan
	SE¼ SW¼	1401	1.00	POND	1904	Thalacker, Marc & Pamela
	SW¼ SE¼	1401	4.00	IRR	1895	Thalacker, Marc & Pamela
	SW¼ SE¼	1401	8.00	POND	1904	Thalacker, Marc & Pamela
	SE¼ SE¼	1401	11.50	IRR	1895	Thalacker, Marc & Pamela
	SE¼ SE¼	1401	6.00	POND	1904	Thalacker, Marc & Pamela
			Section 7			
	SE¼ SW¼	1400	15.40	IRR	1903	Barber, Rex
	SE¼ SW¼	1400	20.00	IRR	1904	Barber, Rex
	NE¼ SE¼	1400	29.00	IRR	1904	Barber, Rex
	SW¼ SE¼	1400	39.00	IRR	1904	Barber, Rex
			Section 8			
	NW¼ NE¼	1400	0.40	IRR	1903	Barber, Rex
	NW¼ NE¼	1400	10.40	IRR	1904	Barber, Rex
	NE¼ NW¼	1400	0.80	IRR	1903	Barber, Rex
	NE¼ NW¼	1400	40.00	IRR	1904	Barber, Rex
	SW¼ NW¼	1401	32.50	IRR	1895	Thalacker, Marc & Pamela
			Section 17			
	NE¼ NE¼	1401	40.50	IRR	1895	Thalacker, Marc & Pamela
	NW¼ NE¼	1401	29.50	IRR	1895	Thalacker, Marc & Pamela
	SW¼ NE¼	1401	37.00	IRR	1895	Thalacker, Marc & Pamela
	SE¼ NE¼	1401	32.50	IRR	1895	Thalacker, Marc & Pamela
	NE¼ NW¼	1102	27.50	IRR	1895	Powers, Sherode & Susan
1	NW¼ NW¼	1102	32.00	IRR	1895	Powers, Sherode & Susan
2	SW¼ NW¼	1102	38.50	IRR	1895	Powers, Sherode & Susan
	SE¼ NW¼	1102	38.00	IRR	1895	Powers, Sherode & Susan
	NE¼ SW¼	1102	23.00	IRR	1895	Powers, Sherode & Susan
	NE¼ SW¼	2200	5.50	IRR	1895	Peterson, Robert & Paula
3	NW¼ SW¼	1102	34.00	IRR	1895	Powers, Sherode & Susan
3	NW¼ SW¼	2100	5.00	IRR	1895	Peterson, Robert & Paula
4	SW¼ SW¼	2100	19.50	IRR	1895	Peterson, Robert & Paula
	NW¼ SE¼	1401	15.00	IRR	1895	Thalacker, Marc & Pamela
	NW¼ SE¼	1401	1.50	IRR	1904	Thalacker, Marc & Pamela
	SW¼ SE¼	1400	18.50	IRR	1904	Barber, Rex
	SE¼ SE¼	1400	1.60	IRR	1895	Barber, Rex
			Section 18			
	SW¼ NE¼	1400	7.90	IRR	1904	Barber, Rex
	SE¼ NE¼	1400	2.20	IRR	1904	Barber, Rex
	SE¼ NW¼	1400	0.40	IRR	1904	Barber, Rex
			Section 19			
			Township 14 South, Range 12 East, W.M.			
	NE¼ SE¼	400	10.00	IRR	1895	Cyrus, Keith & Connie
	NE¼ SE¼	500	1.50	IRR	1895	Christeson, Lee
	NE¼ SE¼	500	0.30	POND	1895	Christeson, Lee
	SE¼ SE¼	500	37.00	IRR	1895	Christeson, Lee
	SE¼ SE¼	500	1.20	POND	1895	Christeson, Lee
			Section 1			
1	NE¼ NE¼	100	33.70	IRR	1885	Thompson, Opal
2	NW¼ NE¼	100	13.30	IRR	1885	Thompson, Opal
2	NW¼ NE¼	100	14.30	IRR	1900	Thompson, Opal
	SW¼ NE¼	100	3.70	IRR	1900	Thompson, Opal
	SE¼ NE¼	100	5.00	IRR	1885	Thompson, Opal

Lot	qQ	Tax lot	Acres	Type	Priority	Owner
	SE¼ NE¼	100	27.30	IRR	1900	Thompson, Opal
3	NE¼ NW¼	100	1.00	IRR	1900	Thompson, Opal
4	NW¼ NW¼	100	6.00	IRR	1900	Thompson, Opal
	NE¼ SE¼	100	1.70	IRR	1900	Thompson, Opal
			Section 2			
	NE¼ NE¼	100	7.00	IRR	190[illegible]	Lazy Z, Joan Hull
	SE¼ NE¼	100	11.00	IRR	190[illegible]	Lazy Z, Joan Hull
	NE¼ SE¼	100	23.00	IRR	190[illegible]	Lazy Z, Joan Hull
	NW¼ SE¼	100	23.00	IRR	190[illegible]	Lazy Z, Joan Hull
	SW¼ SE¼	100	29.00	IRR	1903	Lazy Z, Joan Hull
	SE¼ SE¼	100	31.00	IRR	1903	Lazy Z, Joan Hull
			Section 11			
	NE¼ NE¼	100	35.50	IRR	1889	Cyrus, Willard & Mae
	NW¼ NE¼	200	10.70	IRR	1895	Stengel, Mary
	NW¼ NE¼	302	8.40	IRR	1895	Bartlemay, Anita
	NW¼ NE¼	303	7.90	IRR	1895	Bartlemay, Anita
	NW¼ NE¼	303	0.50	POND	1895	Bartlemay, Anita
	SW¼ NE¼	301	15.30	IRR	1895	Evered, James & Pat
	SE¼ NE¼	100	6.20	IRR	1889	Cyrus, Willard & Mae
	NE¼ NW¼	302	6.70	IRR	1895	Bartlemay, Anita
	NE¼ NW¼	303	9.40	IRR	1895	Bartlemay, Anita
	NE¼ NW¼	304	3.00	IRR	1895	Bartlemay, Anita
	NE¼ NW¼	304	0.10	POND	1895	Bartlemay, Anita
	NW¼ SW¼	500	19.00	IRR	1904	Cyrus, Keith & Connie
	SW¼ SW¼	500	17.00	IRR	1904	Cyrus, Keith & Connie
	NE¼ SE¼	100	6.60	IRR	1895	Cyrus, Willard & Mae
	NE¼ SE¼	100	10.40	IRR	1904	Cyrus, Willard & Mae
	NW¼ SE¼	700	23.00	IRR	1904	Cyrus, Keith & Connie
	SW¼ SE¼	700	15.00	IRR	1895	Cyrus, Keith & Connie
	SE¼ SE¼	700	39.00	IRR	1895	Cyrus, Keith & Connie
			Section 12			
	NE¼ NE¼	100	6.50	IRR	1885	Cyrus, Keith & Connie
	NE¼ NE¼	100	8.50	IRR	1895	Cyrus, Keith & Connie
	NE¼ NE¼	100	10.00	IRR	1903	Cyrus, Keith & Connie
	NE¼ NE¼	100	7.50	IRR	1904	Cyrus, Keith & Connie
	NW¼ NE¼	100	0.55	IRR	1885	Cyrus, Keith & Connie
	NW¼ NE¼	100	9.50	IRR	1895	Cyrus, Keith & Connie
	NW¼ NE¼	100	26.00	IRR	1904	Cyrus, Keith & Connie
	SW¼ NE¼	100	6.00	IRR	1903	Cyrus, Keith & Connie
	SW¼ NE¼	100	23.50	IRR	1904	Cyrus, Keith & Connie
	SE¼ NE¼	100	32.50	IRR	1903	Cyrus, Keith & Connie
	SE¼ NE¼	100	3.50	IRR	1904	Cyrus, Keith & Connie
	NE¼ NW¼	100	24.00	IRR	1903	Cyrus, Keith & Connie
	NW¼ NW¼	100	23.50	IRR	1904	Cyrus, Keith & Connie
	SW¼ NW¼	100	8.00	IRR	1904	Cyrus, Keith & Connie
	SE¼ NW¼	100	11.30	IRR	1901	Cyrus, Keith & Connie
	SE¼ NW¼	100	10.00	IRR	1904	Cyrus, Keith & Connie
	NE¼ SW¼	500	0.50	IRR	1904	Cyrus, Keith & Connie
	NE¼ SW¼	500	5.50	POND	1904	Cyrus, Keith & Connie
	NE¼ SW¼	501	1.50	POND	1904	Cyrus, Keith & Connie
	NE¼ SW¼	701	1.00	POND	1903	Cyrus, Keith & Connie
	NE¼ SW¼	702	2.50	POND	1903	Cyrus, Keith & Connie
	SW¼ SW¼	700	0.60	IRR	1895	Ruffin, Charles & Betty Jo
	SE¼ SW¼	700	4.90	IRR	1895	Ruffin, Charles & Betty Jo
	SE¼ SW¼	705	3.80	IRR	1895	Dorman, Jerry & Penny
	NE¼ SE¼	702	19.60	IRR	1904	Cyrus, Keith & Connie
	NW¼ SE¼	500	0.50	IRR	1904	Cyrus, Keith & Connie
	NW¼ SE¼	702	19.50	IRR	1904	Cyrus, Keith & Connie
	SW¼ SE¼	704	4.50	IRR	1895	Taylor, James & Diana

Lot	qQ	Tax lot	Acres	Type	Priority	Owner
	SW¼ SE¼	705	5.50	IRR	1895	Dorman, Jerry & Penny
	SW¼ SE¼	705	0.20	POND	1895	Dorman, Jerry & Penny
	SE¼ SE¼	405	1.50	IRR	1893	Morris, Richard & Sherry
	SE¼ SE¼	703	12.00	IRR	1895	Taylor, James & Diana
	SE¼ SE¼	704	5.50	IRR	1895	Taylor, James & Diana
			Section 13			
	NE¼ NE¼	100	36.00	IRR	190?	Lazy Z, Joan Hull
	NW¼ NE¼	100	26.00	IRR	190.	Lazy Z, Joan Hull
	SW¼ NE¼	100	28.50	IRR	1903	Lazy Z, Joan Hull
	SE¼ NE¼	100	35.00	IRR	1903	Lazy Z, Joan Hull
			Section 14			
	NE¼ NE¼	405	6.50	IRR	1893	Morris, Richard & Sherry
	NE¼ NE¼	405	6.00	IRR	1895	Morris, Richard & Sherry
	NE¼ NE¼	406	8.50	IRR	1893	Prete, Gene & Barbara
	NE¼ NE¼	406	5.50	IRR	1895	Prete, Gene & Barbara
	NE¼ NE¼	407	2.00	IRR	1893	Timms, Gregory & Sandra
	NE¼ NE¼	407	2.00	IRR	1895	Timms, Gregory & Sandra
	NW¼ NE¼	407	5.00	IRR	1893	Timms, Gregory & Sandra
	NW¼ NE¼	407	5.00	IRR	1895	Timms, Gregory & Sandra
	NW¼ NE¼	408	9.00	IRR	1893	Giguiere, Hugh & Gail
	NW¼ NE¼	408	17.00	IRR	1895	Giguiere, Hugh & Gail
	SW¼ NE¼	301	18.00	IRR	1895	Giguiere, Hugh & Gail
	SW¼ NE¼	403	13.40	IRR	1895	Giguiere, Hugh & Gail
	SW¼ NE¼	403	0.20	POND	1895	Giguiere, Hugh & Gail
	SE¼ NE¼	401	16.00	IRR	1895	Giguiere, Hugh & Gail
	SE¼ NE¼	404	16.00	IRR	1895	Giguiere, Hugh & Gail
	NE¼ NW¼	400	7.00	IRR	1893	Gillespie, Dave & Patricia
	NE¼ NW¼	400	7.50	IRR	1895	Gillespie, Dave & Patricia
	NW¼ NW¼	200	32.00	IRR	1895	Patterson, Kay E.
	SW¼ NW¼	200	29.00	IRR	1895	Patterson, Kay E.
	SE¼ NW¼	300	3.00	IRR	1895	Patterson, Kay E.
	NW¼ SW¼	200	12.00	IRR	1895	Patterson, Kay E.
	NW¼ SW¼	700	5.50	IRR	1895	K.O.A., Dennis McCarthy
	NW¼ SW¼	700	1.00	POND	1895	K.O.A., Dennis McCarthy
	SW¼ SW¼	800	3.50	IRR	1895	K.O.A., Dennis McCarthy
	NE¼ SE¼	500	2.00	IRR	1895	Herring, Janet
	NE¼ SE¼	502	25.00	IRR	1895	Little, Daniel & Patricia
	SW¼ SE¼	500	19.00	IRR	1904	Herring, Janet
	SW¼ SE¼	501	7.00	IRR	1904	Herring, Janet
	SE¼ SE¼	500	21.00	IRR	1895	Herring, Janet
	SE¼ SE¼	500	14.00	IRR	1904	Herring, Janet
	SE¼ SE¼	501	2.00	IRR	1904	Herring, Janet
			Section 24			
	NW¼ NE¼	600	10.00	IRR	1885	Sharpf, Larry & Barbara
	NW¼ NE¼	600	21.00	IRR	1895	Sharpf, Larry & Barbara
	NW¼ NE¼	600	7.00	IRR	1904	Sharpf, Larry & Barbara
	SW¼ NE¼	600	38.50	IRR	1895	Sharpf, Larry & Barbara
	NE¼ NW¼	600	19.00	IRR	1895	Sharpf, Larry & Barbara
	NE¼ NW¼	600	2.10	IRR	1904	Sharpf, Larry & Barbara
	SE¼ NW¼	600	6.00	IRR	1895	Sharpf, Larry & Barbara
	NW¼ SE¼	600	4.50	IRR	1895	Sharpf, Larry & Barbara
	NW¼ SE¼	600	6.00	IRR	1904	Sharpf, Larry & Barbara
			Section 26			
	NW¼ SW¼	3200	40.00	IRR	1895	Runco, Roy
			Section 28			

Township 15 South, Range 10 East, W.M.

Lot	qQ	Tax lot	Acres	Type	Priority	Ownar
4	NW¼ NW¼	1101	30.00	IRR	1895	Sharp, Clay
			Section 3			
1	NE¼ NE¼	600	15.00	IRR	1895	Kendrick, Jerry & Jo
2	NW¼ NE¼	100	25.00	IRR	1895	Hermens, Marvin & Virginia
	SW¼ NE¼	100	40.00	IRR	1895	Hermens, Marvin & Virginia
3	NE¼ NW¼	201	39.50	IRR	1895	Keeton, Arland & Jean
4	NW¼ NW¼	200	11.00	IRR	1895	Johnson, Don
4	NW¼ NW¼	201	16.50	IRR	1895	Keeton, Arland & Jean
4	NW¼ NW¼	202	4.50	IRR	1895	Hufstader, Rick
	SW¼ NW¼	201	36.00	IRR	1895	Keeton, Arland & Jean
	SW¼ NW¼	201	3.00	POND	1895	Keeton, Arland & Jean
	SE¼ NW¼	201	40.50	IRR	1895	Keeton, Arland & Jean
	NE¼ SW¼	400	40.00	IRR	1895	Hahn, Frederick & Elaine
	NW¼ SW¼	301	37.50	IRR	1895	Keeton, Arland & Jean
	SW¼ SW¼	401	34.00	IRR	1895	Bauer, Kimerly
	SW¼ SW¼	401	1.00	POND	1895	Bauer, Kimerly
	SE¼ SW¼	402	40.00	IRR	1895	Brennan, Casey
	NE¼ SE¼	100	18.00	IRR	1895	Hermens, Marvin & Virginia
	NW¼ SE¼	100	40.00	IRR	1895	Hermens, Marvin & Virginia
	SW¼ SE¼	100	39.00	IRR	1895	Hermens, Marvin & Virginia
	SE¼ SE¼	100	25.00	IRR	1895	Hermens, Marvin & Virginia
			Section 4			
1	NE¼ NE¼	102	9.00	IRR	1895	Graham, Bonnie
1	NE¼ NE¼	103	13.00	IRR	1895	Wilson, Burt & Jackie
1	NE¼ NE¼	104	7.50	IRR	1895	Rogers, John & Sharon
	SW¼ NE¼	100	4.50	IRR	1895	Simon, Cheryle
	SW¼ NE¼	105	19.00	IRR	1895	Murphy/Berge, Janice/Dick
	SE¼ NE¼	105	37.00	IRR	1895	Murphy/Berge, Janice/Dick
4	NW¼ NW¼	302	17.00	IRR	1895	Barclay, David
4	NW¼ NW¼	303	7.50	IRR	1895	Tewalt, Richard & Norma
4	NW¼ NW¼	305	8.50	IRR	1895	Tewalt, Richard & Norma
	SW¼ NW¼	301	16.00	IRR	1895	Pardo, Sharon
	SW¼ NW¼	304	17.50	IRR	1895	York, Ervin
	SW¼ NW¼	306	2.50	IRR	1895	York, Ervin
	SE¼ NW¼	101	1.00	IRR	1895	Simon, Cheryle
	NE¼ SW¼	400	36.00	IRR	1895	Redfield, Tygh
	NW¼ SW¼	400	36.00	IRR	1895	Redfield, Tygh
	SW¼ SW¼	400	36.00	IRR	1895	Redfield, Tygh
	SE¼ SW¼	400	38.00	IRR	1895	Redfield, Tygh
	SE¼ SW¼	400	1.00	POND	1895	Redfield, Tygh
	NE¼ SE¼	500	18.00	IRR	1889	Clemens, Cecile
	NE¼ SE¼	500	17.00	IRR	1895	Clemens, Cecile
	NW¼ SE¼	500	7.00	IRR	1889	Clemens, Cecile
	NW¼ SE¼	500	25.00	IRR	1895	Clemens, Cecile
	SW¼ SE¼	500	37.00	IRR	1895	Clemens, Cecile
	SE¼ SE¼	500	31.00	IRR	1895	Clemens, Cecile
			Section 5			
1	NE¼ NE¼	100	37.00	IRR	1895	Salmon, Roy & Marcia
1	NE¼ NE¼	100	0.30	POND	1895	Salmon, Roy & Marcia
2	NW¼ NE¼	100	0.20	IRR	1895	Salmon, Roy & Marcia
	SW¼ NE¼	101	28.00	IRR	1889	Sokol, Dorro
	SE¼ NE¼	100	2.00	IRR	1895	Salmon, Roy & Marcia
	SE¼ NE¼	100	0.50	POND	1895	Salmon, Roy & Marcia
	SE¼ NE¼	101	12.00	IRR	1889	Sokol, Dorro
	SE¼ NE¼	101	20.00	IRR	1895	Sokol, Dorro
	SE¼ NE¼	101	5.50	IRR	1903	Sokol, Dorro
3	NE¼ NW¼	1000	5.00	IRR	1895	Carollo, Ed & Barbara
3	NE¼ NW¼	700	2.50	IRR	1895	Hurtley, David & Judy
3	NE¼ NW¼	800	2.00	IRR	1895	Hurtley, David & Judy

Lot	qQ	Tax lot	Acres	Type	Priority	Owner
3	NE¼ NW¼	900	2.00	IRR	1895	Hurtley, David & Judy
4	NW¼ NW¼	1600	7.50	IRR	1887	Cyrus, Keith & Connie
4	NW¼ NW¼	1600	12.50	IRR	1903	Cyrus, Keith & Connie
4	NW¼ NW¼	1600	1.00	IRR	1904	Cyrus, Keith & Connie
5	SW¼ NW¼	1500	3.50	IRR	1887	Cyrus, Keith & Connie
5	SW¼ NW¼	1600	4.50	IRR	1887	Cyrus, Keith & Connie
5	SW¼ NW¼	1600	2.00	IRR	1904	Cyrus, Keith & Connie
	SE¼ NW¼	1200	1.50	IRR	1895	Hurtley, David & Judy
	SE¼ NW¼	1200	0.50	POND	1895	Hurtley, David & Judy
	SE¼ NW¼	700	1.50	IRR	1887	Hurtley, David & Judy
	SE¼ NW¼	700	12.00	IRR	1895	Hurtley, David & Judy
	NE¼ SW¼	1200	17.50	IRR	1887	Hurtley, David & Judy
	NE¼ SW¼	1200	1.00	IRR	1895	Hurtley, David & Judy
	NE¼ SW¼	500	8.50	IRR	1887	Hurtley, David & Judy
	NE¼ SW¼	600	9.00	IRR	1887	Hurtley, David & Judy
6	NW¼ SW¼	1500	29.50	IRR	1887	Cyrus, Keith & Connie
6	NW¼ SW¼	1500	0.50	POND	1903	Cyrus, Keith & Connie
6	NW¼ SW¼	1500	1.50	POND	1904	Cyrus, Keith & Connie
7	SW¼ SW¼	1500	35.00	IRR	1887	Cyrus, Keith & Connie
	SE¼ SW¼	1300	8.50	IRR	1887	Hurtley, David & Judy
	SE¼ SW¼	1400	8.50	IRR	1887	Hurtley, David & Judy
	SE¼ SW¼	300	8.00	IRR	1887	Hurtley, David & Judy
	SE¼ SW¼	400	8.50	IRR	1887	Hurtley, David & Judy
	NE¼ SE¼	200	17.00	IRR	1889	Cyrus, Willard & Mae
	NE¼ SE¼	200	20.00	IRR	1895	Cyrus, Willard & Mae
	NW¼ SE¼	200	17.50	IRR	1889	Cyrus, Willard & Mae
	NW¼ SE¼	200	19.50	IRR	1895	Cyrus, Willard & Mae
	SW¼ SE¼	200	11.00	IRR	1889	Cyrus, Willard & Mae
	SW¼ SE¼	200	17.00	IRR	1895	Cyrus, Willard & Mae
	SE¼ SE¼	200	9.30	IRR	1889	Cyrus, Willard & Mae
	SE¼ SE¼	200	22.00	IRR	1895	Cyrus, Willard & Mae
	SE¼ SE¼	200	1.00	POND	1895	Cyrus, Willard & Mae
			Section 6			
	NE¼ NE¼	100	2.00	IRR	1895	Sisters School District
	NE¼ NE¼	300	30.00	IRR	1895	Trachsel, Charles & Rita
	NW¼ NE¼	300	31.50	IRR	1895	Trachsel, Charles & Rita
	SW¼ NE¼	300	34.00	IRR	1895	Trachsel, Charles & Rita
	SE¼ NE¼	300	32.00	IRR	1895	Trachsel, Charles & Rita
	NE¼ NW¼	400	22.00	IRR	1895	Trachsel, Charles & Rita
1	NW¼ NW¼	400	38.00	IRR	1895	Trachsel, Charles & Rita
2	SW¼ NW¼	400	21.00	IRR	1895	Trachsel, Charles & Rita
	SE¼ NW¼	400	32.00	IRR	1895	Trachsel, Charles & Rita
	NE¼ SW¼	500	40.00	IRR	1895	Keeton, Boyd & Hazel
3	NW¼ SW¼	500	34.00	IRR	1895	Keeton, Boyd & Hazel
4	SW¼ SW¼	500	28.00	IRR	1895	Keeton, Boyd & Hazel
4	SW¼ SW¼	500	3.00	POND	1895	Keeton, Boyd & Hazel
	SE¼ SW¼	500	40.00	IRR	1895	Keeton, Boyd & Hazel
	NE¼ SE¼	600	38.50	IRR	1895	Cyrus, Alvin
	NE¼ SE¼	600	0.50	POND	1895	Cyrus, Alvin
	NW¼ SE¼	600	30.50	IRR	1895	Cyrus, Alvin
	SW¼ SE¼	600	40.00	IRR	1895	Cyrus, Alvin
	SE¼ SE¼	600	39.00	IRR	1895	Cyrus, Alvin
			Section 7			
	NE¼ NE¼	100	6.00	IRR	1889	Tumalo Farms
	NE¼ NE¼	100	4.00	IRR	1895	Tumalo Farms
	NW¼ NE¼	100	35.00	IRR	1895	Tumalo Farms
	SW¼ NE¼	100	41.00	IRR	1895	Tumalo Farms
	SE¼ NE¼	100	14.00	IRR	1889	Tumalo Farms
	SE¼ NE¼	100	12.00	IRR	1895	Tumalo Farms
	NE¼ NW¼	200	37.00	IRR	1895	Tumalo Farms

Lot	qQ	Tax lot	Acres	Type	Priority	Owner
	NW¼ NW¼	200	29.00	IRR	1895	Tumalo Farms
	NW¼ NW¼	200	1.00	POND	1895	Tumalo Farms
	SW¼ NW¼	200	34.50	IRR	1895	Tumalo Farms
	SW¼ NW¼	200	1.00	POND	1895	Tumalo Farms
	SE¼ NW¼	200	40.00	IRR	1895	Tumalo Farms
	NE¼ SW¼	300	41.00	IRR	1895	Jones, Aaron U.
	NW¼ SW¼	300	35.00	IRR	1895	Jones, Aaron U.
	NW¼ SW¼	300	1.00	POND	1895	Jones, Aaron U.
	SW¼ SW¼	400	14.00	IRR	1895	Lambert, Bob & Sandy
	SW¼ SW¼	600	22.00	IRR	1895	Brockway, Robert & Meg
	SW¼ SW¼	600	1.00	POND	1895	Brockway, Robert & Meg
	SE¼ SW¼	500	13.00	IRR	1895	Lambert, Bob & Sandy
	SE¼ SW¼	500	1.00	POND	1895	Lambert, Bob & Sandy
	SE¼ SW¼	600	19.00	IRR	1895	Brockway, Robert & Meg
	NE¼ SE¼	100	38.50	IRR	1895	Tumalo Farms
	NW¼ SE¼	100	41.00	IRR	1895	Tumalo Farms
	SW¼ SE¼	700	32.50	IRR	1895	Tumalo Farms
	SE¼ SE¼	700	26.00	IRR	1895	Tumalo Farms
			Section 8			
	NE¼ NE¼	400	7.50	IRR	1895	Keeton, Arland & Jean
	NW¼ NE¼	400	31.00	IRR	1895	Keeton, Arland & Jean
	NE¼ NW¼	100	3.40	IRR	1885	Keeton, Arland & Jean
	NE¼ NW¼	100	4.00	IRR	1889	Keeton, Arland & Jean
	NE¼ NW¼	100	19.10	IRR	1895	Keeton, Arland & Jean
	NE¼ NW¼	100	4.00	POND	1895	Keeton, Arland & Jean
	NW¼ NW¼	100	6.60	IRR	1885	Keeton, Arland & Jean
	NW¼ NW¼	100	16.00	IRR	1889	Keeton, Arland & Jean
	NW¼ NW¼	100	17.90	IRR	1895	Keeton, Arland & Jean
	SW¼ NW¼	100	4.00	IRR	1895	Keeton, Arland & Jean
	SE¼ NW¼	100	2.00	IRR	1895	Keeton, Arland & Jean
			Section 9			
	NE¼ NW¼	200	11.00	IRR	1895	Resnick, Bruce & Tracy
	NW¼ NW¼	200	36.00	IRR	1895	Resnick, Bruce & Tracy
	SW¼ NW¼	300	19.50	IRR	1895	Vavrinec, Michael & Jamie
	SW¼ NW¼	400	3.50	IRR	1895	Vavrinec, Michael & Jamie
	SE¼ NW¼	400	2.10	IRR	1895	Vavrinec, Michael & Jamie
	SE¼ NW¼	500	5.40	IRR	1895	Vavrinec, Michael & Jamie
			Section 17			
	NE¼ NE¼	100	38.00	IRR	1895	Friend, Robert & Sandra
	NW¼ NE¼	100	36.00	IRR	1895	Friend, Robert & Sandra
	NW¼ NE¼	100	1.00	POND	1895	Friend, Robert & Sandra
	SW¼ NE¼	800	23.50	IRR	1895	Cyrus, Willard & Mae
	SW¼ NE¼	800	0.04	POND	1895	Cyrus, Willard & Mae
	SE¼ NE¼	1000	1.50	IRR	1895	Cochran, Gene & Mary Jo
	SE¼ NE¼	800	14.20	IRR	1895	Cyrus, Willard & Mae
	SE¼ NE¼	900	12.50	IRR	1895	Cochran, Gene & Mary Jo
	NE¼ NW¼	200	16.00	IRR	1895	Stotts, Larry & Carol
	NE¼ NW¼	300	7.50	IRR	1895	Fetrow, Scott & Lisa
	NE¼ NW¼	301	1.00	IRR	1895	Fetrow, Scott & Lisa
	NE¼ NW¼	400	3.90	IRR	1895	Knott, Leonard & Kay
	NE¼ NW¼	400	0.10	POND	1895	Knott, Leonard & Kay
1	NW¼ NW¼	300	6.00	IRR	1895	Fetrow, Scott & Lisa
1	NW¼ NW¼	300	0.50	POND	1895	Fetrow, Scott & Lisa
1	NW¼ NW¼	400	10.00	IRR	1895	Knott, Leonard & Kay
	SW¼ NW¼	700	22.60	IRR	1869	Cyrus, Willard & Mae
2	SW¼ NW¼	700	4.16	IRR	1895	Cyrus, Willard & Mae
2	SW¼ NW¼	700	0.30	POND	1895	Cyrus, Willard & Mae
	SE¼ NW¼	700	12.00	IRR	1869	Cyrus, Willard & Mae
	SE¼ NW¼	700	4.50	IRR	1895	Cyrus, Willard & Mae

	NE¼ SW¼	1601	4.00	IRR	1895	Currie, Albert Lee & Marcy
	NE¼ SW¼	700	7.00	IRR	1869	Cyrus, Willard & Mae
	NE¼ SW¼	700	2.00	IRR	1895	Cyrus, Willard & Mae
3	NW¼ SW¼	1800	10.00	IRR	1901	Nulton, Karl & Patricia
3	NW¼ SW¼	1900	12.50	IRR	1895	Pray, Donald & Corrine
3	NW¼ SW¼	1900	1.00	IRR	1901	Pray, Donald & Corrine
3	NW¼ SW¼	700	6.40	IRR	1869	Cyrus, Willard & Mae
3	NW¼ SW¼	700	2.20	IRR	1895	Cyrus, Willard & Mae
4	SW¼ SW¼	2000	17.00	IRR	1895	MJM Ranch, Gatlin & MacNeill
4	SW¼ SW¼	2000	0.50	POND	1895	MJM Ranch, Gatlin & MacNeill
4	SW¼ SW¼	2100	11.00	IRR	1895	MJM Ranch, Gatlin & MacNeill
	SE¼ SW¼	2000	17.00	IRR	1895	MJM Ranch, Gatlin & MacNeill
	SE¼ SW¼	2100	17.50	IRR	1895	MJM Ranch, Gatlin & MacNeill
	SE¼ SW¼	2200	0.50	POND	1895	Vermilyea, Grace
	NW¼ SE¼	2300	12.00	IRR	1895	Vermilyea, Grace
	SW¼ SE¼	2300	19.00	IRR	1895	Vermilyea, Grace
	SW¼ SE¼	2300	0.50	POND	1895	Vermilyea, Grace

Section 18

	NE¼ NE¼	2800	26.50	IRR	1895	Vetterlein, Don
	NW¼ NE¼	2800	27.00	IRR	1895	Vetterlein, Don
	SW¼ NE¼	2800	23.00	IRR	1895	Vetterlein, Don
	SE¼ NE¼	2800	4.50	IRR	1895	Vetterlein, Don
	NE¼ NW¼	3303	3.50	IRR	1895	Vetterlein, Don
	NE¼ NW¼	3303	2.00	POND	1895	Vetterlein, Don
	NW¼ NW¼	2800	25.50	IRR	1895	Vetterlein, Don
	SW¼ NW¼	2800	11.50	IRR	1895	Vetterlein, Don
	SW¼ NW¼	2800	1.00	POND	1895	Vetterlein, Don
	SE¼ NW¼	3302	1.00	IRR	1895	Vetterlein, Don
	NE¼ SW¼	2800	16.00	IRR	1895	Vetterlein, Don
	NW¼ SW¼	2800	2.00	IRR	1895	Vetterlein, Don
	NW¼ SW¼	2800	1.50	POND	1895	Vetterlein, Don
	NE¼ SE¼	2501	2.00	IRR	1895	Vetterlein, Don
	NW¼ SE¼	2800	15.50	IRR	1895	Vetterlein, Don

Section 20

	NE¼ NW¼	200	8.90	IRR	1895	Whitehead, Ron
	NE¼ NW¼	200	2.00	IRR	1904	Whitehead, Ron
1	NW¼ NW¼	200	1.10	IRR	1895	Whitehead, Ron
1	NW¼ NW¼	201	10.00	IRR	1895	Kolbe, Eugene & Julie
1	NW¼ NW¼	201	3.50	IRR	1904	Kolbe, Eugene & Julie
1	NW¼ NW¼	99	11.00	IRR	1895	Buell, Jerry & Nancy
2	SW¼ NW¼	302	5.00	IRR	1904	Keith, Whitehead
2	SW¼ NW¼	303	10.50	IRR	1895	Keith, Whitehead
2	SW¼ NW¼	303	6.00	IRR	1904	Keith, Whitehead
2	SW¼ NW¼	304	7.00	IRR	1904	Keith, Whitehead
2	SW¼ NW¼	99	3.00	IRR	1895	Buell, Jerry & Nancy
	SE¼ NW¼	302	11.50	IRR	1895	Keith, Whitehead
	SE¼ NW¼	302	4.00	IRR	1904	Keith, Whitehead
	SE¼ NW¼	304	11.50	IRR	1895	Keith, Whitehead
	SE¼ NW¼	304	1.50	IRR	1904	Keith, Whitehead

Section 30

Township 15 South, Range 11 East, W.M.

This certificate is issued to confirm changes in use and place of use approved by an order of the Water Resources Director entered DEC 29 1997, in Special Order Volume 51, Page 408, approving the Squaw Creek Irrigation District petition for water rights mapping under ORS 541.325 to 541.333. This certificate also confirms the transfers and supersedes the certificates listed in the above order.

The right to the use of the water for the above purposes is restricted to beneficial use on the lands or place of use described and is subject to all other conditions and limitations contained in said decree.

WITNESS the signature of the Water Resources Director, affixed 12/29/97

Martha O. Pagel

Martha O. Pagel, Director

Recorded in State Record of Water Right Certificates numbered 74135.

HB-3111.BWB

Exhibit C

Description of Current System

Description of Present System

The Cloverdale Ditch serves as one of the main conveyance ditches for the Squaw Creek Irrigation District, coming off the main canal. The Cloverdale Ditch supplies water to 1020 acres of irrigated land within the SCID.

The Ditch was originally about 10 miles in length. The upper stretch ran from the Fryrear lift on the SCID main canal to the Lazy Z, by Watson Reservoir. In 1991, SCID moved the headgate to Watson reservoir, eliminating approximately 2.5 miles. The 7.5 miles of remaining ditch has a loss factor of 35% to 45%.

The approximate measurements for the Cloverdale Ditch are as follows: 2.5 feet deep; 8.0 feet wide. At full capacity, the Cloverdale Ditch carries well over 20 cfs of flow.

Exhibit D

Project Description

11-10-2000

Project Analysis Report
Cloverdale Ditch Pipeline

Squaw Creek Irrigation District
Sisters, OR
November 10, 2000

Summary
The project includes the replacement of an existing open lateral (identified as Cloverdale Ditch) with a buried pipeline.

Squaw Creek Irrigation District will construct the project with their own forces and equipment. This portion of project costs will be "in-kind" services. Responsible District official is Marc Thalacker, Manager, Squaw Creek Irrigation District, Sisters, OR.

A. Description of the project

The project consists of the installation of a 24 inch diameter (OD) HDPE pipeline, (22.42 inch ID), and related appurtenances. Pipe is Driscopipe 1000 series pipe, manufactured in accordance with ASTM D3350, testing standard ASTM D2837, and pipe size standard meeting ASTM F714. Driscopipe has provided US Filter, supplier, with a copy of the a materials certification, and a copy was provided SCID. This certification is also stamped on the pipe as delivered to SCID. Class of pipe to be used is DR = 32.5, pressure rating = 50 psi. Pipe joints will be welded together by heat fusion.

Buried pipeline will replace the open lateral. The majority of the conserved water is due to eliminating seepage from the open lateral with the remaining portion coming from reducing system management losses due to improved control. Standard type measuring devices (trapezoidal weir) will be utilized at all outlets.

Delivered water will be pressurized (a minor amount) due to differential elevation between inlet at Watson Reservoir and landowner outlets. Pressure at each outlet will vary relative to elevation drop from the inlet (sta. 0+00 at outlet of the dam) and accumulated pipeline friction loss.

B. Responsible Party, Persons and Tasks

1. Overall Project Coordination - Squaw Creek ID

2. Project - design survey, design, etc. Squaw Creek ID
   SCID was responsible for the design survey & basis hydraulic design. US Filter provided hydraulic design assistance for sizing of pipe

3. Project construction coordination Squaw Creek ID

SCID is responsible:

a) for project installation, construction supervision, quality control, and for meeting compliance of all federal, state and local regulations, as applicable.
b) for obtaining all necessary land easements and permits for construction that occur outside of existing R-O-W.
c) for installing the project
d) for all work performed by other contractors
e) for obtaining permits as necessary for digging and construction across or adjacent to all public and private utilities, i.e. electric, natural gas, water, telephone, TV, etc.

C. Project Design

Field Survey

The field data provided consisted of distance measurement along existing lateral alignment (used for establishing horizontal control, i.e. stations) and bench level survey for establishing elevations at stations, turnouts and selected important points. Elevations used in design review and shown on drawings are referenced to elevations shown on Watson Reservoir Outlet Plan & Profile, by W&H Pacific, August,1990. Data provided for this engineering analysis was provided by SCID.

Design basis

1. Basic hydraulic design computations were made by SCID, with assistance from US Filter, using a manufacturers computer program, provided by Driscopipe, for gravity flow plastic pipelines (i.e. using Mannings formula).
2. Design criteria for appurtenances, air vents, thrust blocks, drains, access, outlets, backfill material, will be developed using manufacturers design and installation recommendations Appurtenances (i.e. air-vacuum relief valves, pressure relief valves, gate valves, misc. fittings, etc.) were designed/selected based on manufacturers recommendations
3. Manufacturer references:
   DRISCOPIPE: Materials, Design and Installation Manuals

Appurtenances

Air vents and/or air-vacuum valves are to be installed at beginning of the pipeline just downstream of the dam (4 inch), at all abrupt changes in grade (increasing grades) (3 inch), at each isolation (inline) valve (3 inch), at all high spots (3 inch), and at the high point in each turnout assembly between the main pipe and the shutoff valve. Maximum distance between air relief/vacuum valves on the mainline is to be 1300 feet (SCID selection). All air vent assemblies will be attached to the 24 inch mainline pipe using the fusion welding process, with a flanged fitting for the air vent assembly attachment.

Turnout assembly for water delivery will include a shutoff (butterfly valve) controlled by SCID, with misc. elbows and fittings, air-vacuum relief valve, and a flow measuring device. All turnout

assemblies will be attached to the 24 inch pipe using bolt-on steel saddles with a flanged steel fitting for the valve assembly attachment.

A butterfly valve or flow restrictor may need to be installed at end of pipe to control outflow in order to assure having a net hydraulic pressure at all upstream delivery outlets at all flow conditions. The valve should not restrict the opportunity to drain the pipe. If a valve is installed, then a pressure relief valve will be necessary just upstream from the valve

Concrete thrust blocks should be installed at major changes in direction (i.e. 90 degrees), abrupt changes in grade, at each isolation valve, and at end of pipeline (i.e. a concrete outlet box). Generally, slight changes in direction of the pipe can be accomplished by field sweeping of the trench (pipe). If proper compaction around the pipe is obtained, field sweeps do not require thrust blocks. Good soil compaction around fittings such as elbows (i.e. less than 60 degrees) is usually sufficient. If thrust blocks are required in low density soils, concrete bearing surfaces poured against undisturbed soil (i.e. side of the trench) will generally provide adequate protection. A thrust block is necessary just downstream from Watson Reservoir to prevent creep due to expansion and contraction and any thrust created due to flow conditions.

Drains should be installed at all low points, i.e. at the lower elevation 90 degree elbows on the east side of Camp Polk Road, and next to Christensens.

Installation

The pipeline will be installed in the existing ditch location for which SCID has easements. The alignment of the existing ditch is somewhat crooked north of Highway 126. Four elbows will probably be needed at the 90 degree turns at Camp Polk Road (2 each) and property edge of Aspen Lakes Golf Course and Lee Christensen's (2 each). However, SCID will sweep other turns in the ditch as much as possible to eliminate elbows.

Installation assistance is being provided by US Filter, i.e. for the fusion welding of pipe joints, air vents, access points and outlets.

Installation Quality Control

Squaw Creek Irrigation District will be responsible for quality control of installation of the pipeline. All installation shall meet manufacturers specifications. Major items include:

A. SCID will provide installation of all HDPE pipeline and all appurtenances:
1. Trench excavation depth and grade control should be on a uniform grade so no low or high spots occur. Where high spots occur air vents should be installed. Where low spots drains should be installed.
2. Pipe invert grade control at time of laying pipe should be on uniform grade
3. Laying of pipe (including assurance of water tight joints, meeting bending and joint deflection limitations, locating and installing elbows, in accordance with manufacturers recommendations, etc.)
4. Installation and compaction of initial bedding and final backfill material should be in accordance with manufacturers recommendations

5. SCID should assure compliance with applicable safety requirements during construction
6. SCID should provide suitable site clean up

B. SCID will provide there own shop designs and the installation of water delivery turnouts, inlet and outlet structure, etc.

1. Concrete structures will be shop designed by SCID (including meeting required dimensions, reinforcing steel placement, form bracing, etc.
2. Concrete and placement will be provided by SCID(including concrete mix, slump, vibrating, finish, etc.)

C. SCID will provide shop designs and the installation at county road crossings

1. SCID should meet minimum applicable Deschutes County Road Dept. requirements for installation of culverts and paving replacement at county road crossings, where applicable.

Other Recommendations:

1. The initial annual filling of the pipeline should be done carefully and slowly. The minimum initial pipeline filling time should be 24 hours.
2. Immediately after the installation of the pipeline, frequent inspections should be performed to monitor operation. Any vent, stand pipe, air relief, vacuum release or pressure relief valve that is plugged or damaged and not functioning properly, should immediately be repaired or replaced.
3. Periodically inspect for trench backfill subsidence or erosion throughout the pipe length.
4. Annually inspect air-vacuum valves, pressure relief valves, control valves, etc.
5. Annually inspect flow meters and assure flow accuracy.
6. The pipeline should be drained annually after the irrigation season is over using pipe outlet drain facilities.
7. The minimum closing time on turnout valves should be 2 seconds per turn in order to avoid excessive surge pressures.
8. Periodically check inlet and outlet structure and appurtenances for damage and cracks. Repair as appropriate.

Sedimentation

Sands (coarse and fine) drop out in the upper part of the reservoir (i.e. in the constructed forebay just downstream from the inlet of the canal). Silts are carried on down into the reservoir, but appear to drop out in the upper part of the reservoir. There was little evidence of sediment being settled out in the open lateral downstream of the dam (SCID statement). With a flow of 10 cfs in the pipe, velocity will be 4 fps. This will carry silts without deposition in the pipe. With a flow of 5 cfs, velocity will be 2 fps. Silt size material will deposit at this flow (velocity). It is wise for SCID to provide access facilities at intervals of 500 – 1000 ft, so a high pressure hose can be inserted into the pipe to provide a high velocity/energy flow to dislodge any sediments that have settled in the pipe.

Pipeline Hydraulic Design Analysis:

(Note: Field survey data is available only from Watson Dam north to Highway 126)

Watson Reservoir		Elevation
Max water surface in reservoir		approx 120
Min water surface in reservoir-	approx	109
Invert of drainline conduit at outlet	-	105.0

Bartlemay turnout (sta 53+00).	
Bottom of upper ditch	77.9
Approx water surface upper ditch	79.9
Bottom lower ditch	75.7

Highway 126 (sta 94+70),	
Invert of culvert south side	62.8
Approx water water surface	64.8

Hydraulic Gradients	slope (ft/ft)
Max - Dam (upstream of dam) to Bartlemay	.0076
Min – Dam (upstream of dam) to Bartlemay	.0055
Alternate – Dam (invert at outlet) to Bartlemay	.0047
Bartlemay to Highway 126	.0036
Max – Dam (upstream of dam) to Highway	.0056
Min – Dam (downstream of dam) to Highway	.0042
Estimated average grade from just below Watson Dam down to Holmes Road just apstream of McKenzie Res. Elev & Distance was taken from 7 ½ min Topo Quad sheet.	.0021

Note: SCID determined that all turnouts will be valved turnouts, thus maintaining the available hydraulic head throuthout the pipe. Outletting the mainline into an open box removes all available hydraulic head; both upstream and downstream.

Using 24 inch diameter (OD), DR = 32.5, ID = 22.5 inch, Mannings n = .009

Flow at:

S = .0042 Q = 17.8 cfs (Using min slope from Watson Dam to Highway)

S = .0056 Q = 20.5 cfs (Using max slope from Watson Dam to Highway)

S = .0021 Q = 12.6 cfs (Using estimated ave slope in Cloverdale Ditch (ditch only) from just below Watson Dam to Holmes Road near Mckenzie Reservoir. This does not include the available elevation of water surface within the reservoir when it is full. It also assumes 24 inch pipe is used all of the way. Actual field survey data was not available to check this. Elevations and distance were taken from 7 ½ Min Topo Quad sheet.

S = .0026 Q = 13.9 cfs (Using estimated average slope in Cloverdale Ditch from a near max water surface in Watson Reservoir to Holmes

Road. This includes the 15 ft of available elevation within the reservoir.

Observation: The maximum flow of 17.8 cfs meets SCID's objectives for flow in the Cloverdale Pipeline using the minimum slope from Watson Dam to Highway 126. The estimated maximum flow of 12.6 cfs from Watson Dam to McKenzie Reservoir (when the reservoir is almost empty) also meets SCID's objectives. The estimated maximum flow of 13.9 cfs from Watson Reservoir to McKenzie Reservoir (when reservoir is nearly full) also meets SCID's objective

Elwin A. Ross, P E
Redmond, OR

REGISTERED PROFESSIONAL ENGINEER 8316 OREGON JULY 30, 1976 ELWIN A. ROSS

Expires 12-31-00

Exhibit E

Map Showing Project

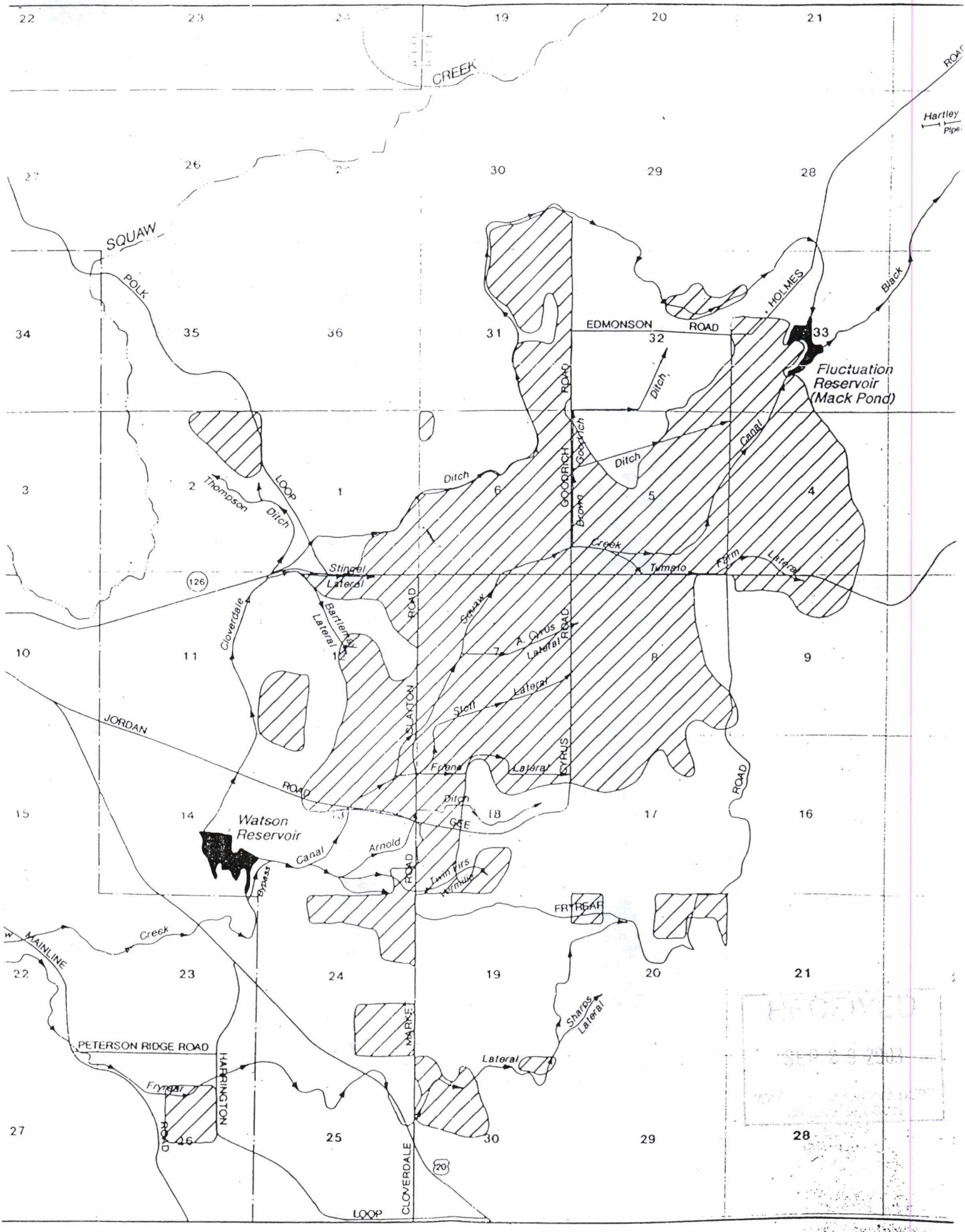
CREEK
SQUAW
POLK
LOOP
Thompson
Ditch
Stingel
Lateral
Cloverdale
Bartlemay
Lateral
ROAD
Squaw
Creek
A. Cyrus
Lateral
Stoll
Lateral
SLATON
CYRUS
JORDAN
ROAD
Fryman
Lateral
Ditch
GEE
Watson
Reservoir
Canal
Arnold
Bypass
Twin Firs
Fryman
FRYREAR
MAINLINE
Creek
PETERSON RIDGE ROAD
HARRINGTON
Fryman
ROAD
MARKE
Sharps
Lateral
Lateral
CLOVERDALE
LOOP
20
126
EDMONSON
ROAD
32
33
HOLMES
Black
Hartley
Pipe
Fluctuation
Reservoir
(Mack Pond)
Ditch
ROAD
GOODRICH
Goodrich
Ditch
Canal
Brown
Creek
Tumalo
Farm
Lateral
ROAD
ROAD
ROAD
ROAD
34
35
36
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Exhibit F

Project Budget

Project Budget

The Cloverdale Ditch Pipeline Project is estimated to cost $660,000. The breakdown of the costs is set out on the next page.

SCID has applied for and received a grant from the Deschutes Basin Resources Conservancy (DRC) in the amount of $260,000 towards this project. The SCID will cover the remaining cost (approximately $400,000) of the pipeline project. The agreement between the DRC and SCID requires that the SCID put 3.0 cfs or 50% of the water conserved through the project (whichever is greater) to instream flows.

Copies of the SCID grant proposal page and the contract between the SCID, the DRC and the Oregon Water Trust is attached.

CLOVERDALE
DRC/SCID
PROJECT

PIPELINE:	TOTALS:	NOTES:
EQUIPMENT RENTAL	$5,000.00	
EXCAVATION	$194,000.00	
TRUCKING	$132,000.00	
BACK FILL	$50,000.00	12,500 Yards backfill
MATERIALS	$3,000.00	Concrete, Tracer wire, etc
FIXTURES	$15,000.00	Tees, saddles, airvents, pressure relief valve,48"to 24" reducer
PIPE	$257,000.00	
CULVERTS	$4,000.00	
COMBINED TOTAL~	$660,000.00	

January 7, 2000
DRC Project Selection Criteria applied to:
SCID Piping Project - Cloverdale piping project

Proposed projects are evaluated to asses their sustainability in meeting the following criteria and are judged to PASS, FAIL, or be at RISK of failing in each of the following six categories. The asterisk (*) indicates that unsatisfactory conditions for this criteria (i.e. FAIL) would be a fatal flaw in the project.

Project Summary - Cloverdale
Total Project Cost: $660,000 *Funds requested of DRC*: $260,000
Brief Description: The Cloverdale area of the Irrigation District consists of large irrigated parcels and one 200 acre subdivision with 30 irrigated parcels. This project will replace approximately 15,840' of open ditch with pipe. The pipe diameter to be used would be 24inches. The estimated water savings amounts to 4 to 5 cfs or 8 to 10 acre-feet per day. The pipe costs are expected to be around $260,000 and the installation costs around $400,000.

Project Evaluation

A. Ecological Function
1. *Addresses a priority ecological goal of DRC.
2. *Compliments or is complimented by other activities in the Basin in pursuit of the ecological goal.
3. Negative ecological impacts of project are minimal or can be mitigated.

This project directly addresses the DRC's goal to improve water quality and quantity by increasing stream flows. It complements other Basin efforts to pipe irrigation canals for water conservation. There are no negative ecological impacts.

B. Feasibility
1. *Technically effective - high likelihood of project achieving goal.
2. *Arranges for necessary coordination with and approvals from appropriate agencies.
3. *Includes evaluation of conditions, both before and after the project, to document effectiveness.

SCID has had success with this piping procedure in the past. There is no agency approval needed. Measuring conserved water will document its effectiveness.

C. Partnerships
1. *Involves voluntary participation of the resource owner
2. Uses partnership(s) and leveraging of funds.
3. *Partners demonstrate to capability to accomplish their part of the project.

SCID is voluntarily proposing this project to conserve water. It will partner with the DRC and use its own funds to leverage DRC funds. Past SCID piping project success demonstrates its capability.

D. Community Support

1. Builds trust and understanding between groups/facilitates education.
2. Assists local economy/is acceptable to local community.
3. Negative economic or social project impacts are minimal or can be mitigated.

Because SCID will be working with the Irrigation members there is already trust established at the projects onset. This project will help educate water users about transmission losses and the value of contributing to improving stream flows. The local economy is supported by continuing to deliver irrigation water. The local community is accepting of this piping project.

E. Cost-Effectiveness
1. *Cost estimate is sound
2. *Is cost-effective compared to other means of achieving the same goal.
3. *DRC participation structured to ensure funds are well spent.

SCID has completed several similar projects and can accurately estimate costs. There are other methods of water conservation being explored that may be more cost-effective, but are not available at this time.

F. Critical Need
1. DRC support is vital or delay may foreclose opportunity.

WATER RIGHTS TRANSFER AGREEMENT
for the
CLOVERDALE DITCH PIPING PROJECT
between
DESCHUTES BASIN RESOURCES CONSERVANCY
and
OREGON WATER TRUST
and
SQUAW CREEK IRRIGATION DISTRICT

1. Background and Purpose. The Squaw Creek Irrigation District (District), Deschutes Basin Resources Conservancy (DRC) and Oregon Water Trust OWT) enter into this Water Rights Transfer Agreement (the "Agreement") for the purpose of installing a distribution pipeline in the Cloverdale Ditch ("the Project") and transferring a certain portion of the water conserved thereby to an instream water right for Squaw Creek. The Project will provide several benefits to the District, the general public and the environment. The primary effect of piping the Cloverdale Ditch is to reduce water losses due to seepage. Other benefits of the Project may include eventual end of system spill savings. The primary effect of this seepage reduction is to improve the reliability of water delivery to District patrons, which will, in turn, improve economic activity. In turn, the District agrees to transfer a certain quantity of the water savings from this project to instream water rights through the Oregon Conserved Water Act, Oregon Revised Statutes (ORS) 537.455 – 500.

The parties desire to enter into this Agreement to set forth the terms and conditions of the DRC's agreement to contribute funding to the Project in exchange for the District's agreement to transfer a portion of its water right to an instream water right (as authorized by ORS Chapter 537.455 and pursuant to procedures established by the Oregon Water Resources Department in Oregon Administrative Rules (OAR) Chapter 690, Division 18.) The three parties to the Agreement will fulfill their obligations as a condition of Federal and State of Oregon funding.

2. The Project. The Project will replace approximately 14,880 feet of open ditch, known as the Cloverdale Ditch, with 24-inch diameter pipe for the purpose of decreasing water loss due to seepage. At full demand, the ditch delivers 21 cubic feet per second (cfs) to 15 farms. The District estimates water losses of four (4) to five (5) cfs during peak delivery periods. The Project proposes $400,000 of the funding will come from the District and the remaining $260,000 will come from the DRC.

3. Agreement to Provide Funding. The DRC agrees to provide $260,000 to the District as a contribution towards the cost of completing the Project.

Funding will be provided upon completion of all National Environmental Policy Act and DRC funding requirements as outlined in the DRC Terms and Conditions Contract (Attachment 1). The District shall achieve Project installation and determine the conserved water no later than May 1, 2001. The District shall maintain the Project at all times in a workpersonlike manner. The District agrees to reimburse the DRC the invoiced price per foot for any pipe that is not installed before May 1, 2001.

4. Transfer of Water Rights to Instream Water Right. In exchange for the DRC's contribution described above, the District agrees to the provisions set out in this section regarding the project completion and allocation of conserved water to an instream water right.

A. Water Rights Delivered Through the Cloverdale Ditch

The Cloverdale Ditch services a total of 1020.7 acres. The water rights delivered by the ditch are 3.1 cfs 1887, 0.2 cfs 1889, 15.3 cfs 1895 and 1.3 cfs 1904.

B. Conserved Water

The responsibilities of the parties are as follows:

The DRC agrees to: provide $260,000 to the District as a contribution to the cost of completing the Project in return for at least 3 cfs or one half of the conserved water from the Project, whichever is greater.

The District agrees to: sign the Conserved Water Application prepared by OWT described below no later than 60 days after disbursement of funds from the DRC. The Conserved Water Application will seek two allocations of conserved water. The first allocation will be to the State of Oregon for 3 cfs as an instream flow. Any water conserved in excess of 3 cfs will be included in the second allocation. The second allocation will allocate the next 3 cfs to the District. Any conserved water in excess of 6 cfs will be divided equally between the District and the instream flow right held by the State of Oregon.

OWT agrees to: prepare the Conserved Water Application. OWT will obtain the District's signature on said application and submit the application to the Oregon Water Resources Department (OWRD) for approval. OWT expressly makes no warranties or promises regarding OWRD's approval, rejection or modification of said application nor regarding the timeliness with which the application is reviewed and acted upon by OWRD.

The District further agrees that it will not exercise its right to request a decrease in the amount of conserved water as authorized in OAR 690-018-0062 subsection 2.

C. Determination of Conserved Water

The District Manager will determine the amount of water conserved by the Project immediately after project completion. The District Manager will measure flows at the Ditch headgate at Watson Reservoir at full operational capacity. Full operational capacity is defined as delivering 100% of the Cloverdale water rights described in section 4, part A. The Deschutes Basin Watermaster will review measurements to determine if standardized methods were used to assure accuracy. Measurement will be referenced with historical flow data recorded and collected by the District to determine conserved water. The priority dates of the conserved water will be allocated as follows: 16% of the conserved water will have an 1887 priority date, 4% will have an 1889 priority date, and 80% will have an 1895 priority date but will be distributed as outlined in section 4, part E.

D. Instream Water Right

In accordance with the terms of this Agreement, there will be allocated to the State of Oregon, Water Resources Department, an instream water right as per the conserved water statute defined in section 1, paragraph 1 and 2 of this agreement.

E. Operational Agreement

The Squaw Creek Irrigation District, for the benefit of the stream, agrees to distribute the 3 cfs instream water right, outlined in section 4, part B above, at all times in addition to meeting existing downstream demands. The Watermaster will use the Squaw Creek Irrigation District stream gauge # 14076000 and the Squaw Creek stream gauge # 14076050 for determining the required flows.

Any conserved water in excess of 6 cfs will be distributed to the District and the stream equally and by priority date in allocation as described in section 4, part C.

F. Project Completion

Project completion is defined as the date of installation and testing of the distribution pipeline, to occur no later than May 1, 2001, in the Cloverdale Ditch.

5. Term of the agreement. This agreement is effective on the date of the last signature and is perpetual.

6. District's Representations and Warranties. District represents and warrants that: (a) it has the authority to enter into this agreement; (b) that it has the authority to construct the Project; (c) its portion of the water right described in the Certificate is free and clear of liens, claims or encumbrances and (d) that the water rights subject to this Agreement are in all other respects valid and transferable.

7. Water Use. District shall comply with the limitations of the Instream Water Right and shall not pump, store, divert or use any waters of Squaw Creek described under the Instream Water Right or the Operational Agreement described above in section 4, part E.

8. Access. District grants DRC and its agents, employees and contractors, access to the Property for the purposes of installing any necessary water measuring or control devices, conducting any appropriate evaluations, and monitoring water use. DRC shall be permitted to install locks or other equipment necessary to prevent the water described in the Instream Water Right from being diverted by the District. Access shall be limited in time from 7:00 a.m. to 6:00 p.m., Monday through Friday, excluding holidays.

9. Default. Any deliberate interference by the District with the lawful orders of the Watermaster pertaining to the protection of the Instream Water Right or if the District attempts to use Squaw Creek water in violation of the Operational Agreement described in section 4, part E, above shall constitute a default. Additionally, default shall occur with failure to comply with any other term or condition or obligation within 30 days after written notice specifying the nature of the default. These terms, conditions and obligations include, without limitation, non-payment, refusal to sign an application, failure of representations and failure to transfer conserved water.

10. Time is of the Essence. Time is of the essence with respect to every obligation of this Agreement.

11. Remedies. In the event of default, DRC may withhold any remaining funds, shall be reimbursed for its expenditure and may pursue all other remedies available under applicable law.

12. Indemnities. District will indemnify and hold harmless DRC and OWT from and against any demand, claim or action arising out of or in any way related to District's breach of this Agreement, including without limitation, the failure of the representations and warranties made in this Agreement to be true; or arising out of or in any way related to any demand, claim or action brought by a District member; or arising out of or in any way related to any demand, claim or action challenging the District's authority to undertake the Project.

13. Attorney's Fees. If a suit, action or arbitration is instituted in connection with any controversy arising out of this Agreement or to enforce any rights hereunder, the prevailing party shall be entitled to recover all of its attorney fees, paralegal fees, costs and disbursements and other expenses from the non prevailing party, including without limitations those arising before and at a trial, arbitration or other proceeding, and in any appeal or review

14. Notices. Notices sent under this Agreement shall be in writing and sent by certified or registered mail, return receipt requested, postage prepaid to such party at

the address set forth below or to such other address specified by a party and delivered to the other party by written notice in accordance with this paragraph. Notices are effective three (3) days after placement in the U.S. Mail.

15. Binding Effect. The provisions of this Agreement shall be binding upon and inure to the benefit of the parties and their respective successors and assigns.

16. Assignment. No Party shall assign its rights and obligations under this Agreement without the other Parties prior written consent, which consent shall not be unreasonably withheld.

No consent of the District will be required where the DRC and/or OWT might use the instream water right acquired pursuant to this Agreement to help develop and establish a "mitigation bank" or "water bank" for the purpose of facilitating further mitigation and ecosystem restoration in the Deschutes Basin. Such use may or may not involve an assignment of rights under this Agreement. In the event such assignments are made, the assignees shall not have a direct right of action against the District, but only against the DRC and/or the OWT.

17. Governing Law. This agreement shall be governed by and construed in accordance with the laws of the State of Oregon.

18. Waiver. The Parties do not intend that any right or remedy given to a Party on the breach of any provision under this Agreement be exclusive; each such right or remedy is cumulative and in addition to any other remedy provided in this Agreement or otherwise available at law or in equity. If the nonbreaching Party fails to exercise or delays in exercising any such right or remedy, the nonbreaching Party does not thereby waive that right or remedy. In addition, no single or partial exercise of any right, power, or privilege precludes any other or further exercise of a right, power, or privilege granted by this Agreement or otherwise.

19. Modification. This Agreement may not be modified or amended except by the written agreement of the parties. This Agreement may not be modified or amended orally.

20. Severability. If any term or provision of this Agreement or the application thereof to any person or circumstance shall to any extent be invalid or unenforceable, it shall not affect the other provisions hereof and the remainder of this Agreement shall be valid and enforceable to the fullest extent permitted by law and as though such invalid and or unenforceable provisions where omitted.

21. Integration. This Agreement, together with the DRC Terms and Conditions Contract, contains the entire agreement and understanding of the parties and supersedes all prior and contemporaneous agreements between them.

22. Successor Interests. This Agreement shall be binding upon and inure to the benefit of the assigns and successors in interest of each of the parties hereto.

Ron Nelson
Chairman
Deschutes Basin Resources Conservancy
1504 NW 3rd St.
Bend, OR 97701

9.20.2000
Date

Robert Lambert
Board Member
Squaw Creek Irrigation District
PO Box 2230
Sisters, OR 97759

9-19-2000
Date

Glen Cooper
Board Member
Squaw Creek Irrigation District
PO Box 2230
Sisters, OR 97759

9/20/2000
Date

Lee Christensen
Board Member
Squaw Creek Irrigation District
PO Box 2230
Sisters, OR 97759

9/19/00
Date

Marc Thalacker

9/20/2000

Marc Thalacker
District Manager
Squaw Creek Irrigation District
PO Box 2230
Sisters, OR 97759

Date

Andrew Purkey

9/21/2000

Andrew Purkey
Executive Director
Oregon Water Trust
111 S.W. Naito Parkway, Suite 404
Portland, OR 97204

Date

Exhibit G

Land Use Information Form

Oregon

WATER
RESOURCES
DEPARTMENT

NOTE TO LOCAL GOVERNMENTS

The person presenting the attached request for land use information is applying for a transfer of water right. The Water Resources Department (WRD) requires its applicants to obtain land use information to be sure water rights do not result in land uses that would violate your comprehensive plan.

You will receive notice once the applicant formally submits his or her request to WRD. Please complete this form and *return it to the applicant for inclusion their application.* Your attention to this request for information is greatly appreciated by the Department. If you have questions concerning the form, please contact us at 378-3739.

Commerce Building
158 12th Street NE
Salem, OR 97310-0210
(503) 378-3720

Planning Official Initials: _____

Description of Water Use

Note to Applicant: This sheet will provide local planning staff with a basic description of your proposed water use. Please fill out this sheet before bringing the attached land use form to your local planning office. It will help local planning offices complete your land use information form quickly.

Note to Local Planning Officials: Please initial this sheet. Do not separate it from the land use information form. If needed, please make a separate copy for your records.

Applicant Name: OREGON WATER TRUST
Address: 111 S.W. NAITO PKWY, SUITE 404
PORTLAND, OR 97204
Phone: (503) 552-9022

Please indicate what you will use the water for. Check all boxes that apply and fill in the blanks with key characteristics of the project

- ☐ Irrigation (crop type, golf course, nursery or greenhouse): _____
- ☐ Livestock (type of livestock, feedlot, slaughterhouse): _____
- ☐ Residential (# units, single or multi-family, # lots if partition or subdivision): _____
- ☐ Commercial (i.e., retail, office, restaurant, gas station, hotel, service, etc.): _____
- ☐ Industrial (i.e., factory, pulp mill, research and development, processing, etc.): _____
- ☐ Institutional (i.e., school, library, etc.): _____
- ☐ Mining (aggregate, metal, open pit, placer, etc.): _____
- ☐ Recreation (park, campsite, pond, etc.) _____
- ☑ Fish and Wildlife (pond, hatchery, etc.) INSTREAM flow to benefit fish and aquatic habitat
- ☐ Hydropower (dam, reservoir, power generating or transmitting facilities): _____
- ☐ Other (Name and list key characteristics): _____

Indicate sources for the proposed water use below:	Indicate the estimated quantity of water the use will require.
☑ Surface Water Name sources: SAUVIE CREEK, tributary of DESCHUTES RIVER	3.0 Cubic feet per second. 1346.4 Gallons per minute. 600 Acre-Feet
☐ Reservoir or pond	
☐ Ground Water	

RECEIVED
SEP 29 2003
WATER RESOURCES DEPT
SALEM, OREGON

Water Resources Department
Commerce Building
158 12th Street NE

Version 10/8/91

b) Please provide printed name and written signature.

Name: Catharine Tilton Date: 2/16/01

Title: Associate Planner Phone: (541) 383-6719

Signature: Catharine Tilton

Local governments are invited to express special land use concerns or make recommendations to the Department regarding this proposed use of water below, or on a separate sheet.

Additional Comments:

Water Resources Department
158 12th NE
Salem, OR 97310
(503)378-3739

Land Use Information Form: Water Right Transfers, Use of Conserved Water, Exchanges

This information is needed to determine compatibility with local comprehensive plans as required by ORS 197.180. The Water Resources Department will use this and other information to evaluate the water use application. **DO NOT FILL OUT THIS FORM IF: 1) water is to be diverted, conveyed, and/or used only on federal lands; or 2) if ALL OF THE FOLLOWING APPLY: a) the application is for a change in the place of use, b) there are no structural changes, c) the use is irrigation, and d) the use is located in irrigation districts or exclusive farm use zones.**

Applicant's Name: OREGON WATER TRUST
Address: 111 S.W. NAITO PKWY, SUITE 404
City: PORTLAND State: OR Zip: 97204 Day Phone: (503) 552-9022

Please provide information as requested below for all tax lots on or through which water will be diverted or used. (Attach extra sheets as necessary.) Applicants for municipal use may substitute existing and proposed service area boundaries for the tax lot information requested below.

(CHECK ALL THAT APPLY)

TAX LOT LOCAL ID #	PLAN DESIGNATION/ZONING (e.g. Rural Residential/RR-5)	WATER DIVERTED	WATER CONVEYED	WATER USE
	SEE ATTACHED			
	"CHANGE IN PLACE OF USE"			

Please list all counties and cities within which water is proposed to be diverted, conveyed, and/or used.

The following section must be completed by a planning official from each county and city listed unless your project will be located entirely within the city limits. In this case, only the city planning agency must complete this form. Please request additional forms as needed.

For Local Government Use Only

Local government planning officials are to complete the remainder of this form and return it to the applicant for inclusion in the application.

a) Check the appropriate box below and provide requested information.

☑ Land uses to be served by proposed water uses (including proposed construction) are allowed outright or are not regulated by your comprehensive plan.
Cite applicable ordinance section(s); _____. Go to section b) on reverse side.

☐ Land uses to be served by proposed water uses (including proposed construction) involve discretionary land use approvals as listed in the table below. Note: Please attach documentation of applicable local land use approvals which have already been obtained. (Record of Action plus accompanying findings is sufficient.)

(CHECK THE BOX THAT APPLIES)

Type of Land Use Approval Needed (e.g. plan amendments, rezones, conditional use permits, etc.)	Cite Most Significant, Applicable Plan Policies & Ordinance Section References	Already Obtained	Already Denied	Being Pursued Satisfactorily

ATTACHMENT: Change In Place Of Use

This is a conversion of a consumptive use to an instream flow through a conserved water project. Therefore, the instream right would run from the existing point of diversion on Squaw Creek, 998' N. and 1211' E. from the SW corner of Section 21, in the SW ¼ SW ¼, Section 21, T 15 S, R 10 E, W.M., to the mouth of Squaw Creek. The instream water right is for a rate of flow of 3.0 cfs during the period of beneficial use. The instream flow will be allocated on a daily average basis up to that rate for the usual and accustomed irrigation season in the Deschutes Basin. If return flows are determined to be a significant factor in flow downstream, the right will be reduced by the determined return flow amount.

Remarks: This application is for the transfer of the above-described water right. The proposed instream water right is to replace a portion of an existing instream water right on Squaw Creek.

Exhibit H

ODFW Statement of Beneficial Use

EXHIBIT H

PUBLIC USE PROVIDED BY INSTREAM WATER RIGHTS

I believe that a portion of the water right described as Certificate No. 74135 will provide for the conservation, maintenance and enhancement of aquatic and fish life and fish habitat in Squaw Creek, tributary to the Deschutes River, if converted to instream. Specifically, the following benefits will likely be provided:

Enhancement of the migration corridor and spawning and rearing habitat for redband and brown trout will likely be improved in the reach of the instream water right.

Dated: 1/29/01

Signed: Steve Marx

Steve Marx
District Fisheries Biologist
Bend, Oregon

Exhibit I

Evidence of Use

AFFIDAVIT

STATE OF OREGON)
)ss
County of Deschutes)

I, Marc Thalacker, being first duly sworn, hereby depose and swear to the following:

1. I am the manager of the Squaw Creek Irrigation District, which is responsible for the management and delivery of the water described under water rights certificate 74135.
2. I have personal knowledge by virtue of my management of the Squaw Creek Irrigation District that the water rights described under water rights certificate 74135 have not been forfeited as provided under ORS 540.610 due to nonuse for any period of five successive years within the last fifteen years.

IN WITNESS WHEREOF, I hereunto set my hand this 15 day of February, 2001.

By: Marc Thalacker
Marc Thalacker
Squaw Creek Irrigation District
68000 Hwy 20 W.
Sisters, OR 97759

This instrument was subscribed and sworn before me on this 15 day of February 2001, by Marc Thalacker.

Joyce G. Burdick
NOTARY PUBLIC FOR OREGON

My Commission Expires: _____

OFFICIAL SEAL
JOYCE G BURDICK
NOTARY PUBLIC - OREGON
COMMISSION NO. 304872
MY COMMISSION EXPIRES SEP. 17, 2001

Exhibit J

SCID Manager Letter Regarding Consultation

SQUAW CREEK IRRIGATION DISTRICT
P. O. BOX 2230 ~ 68000 HWY. 20 W.
SISTERS, OREGON 97759
541-549-8815 ~ FAX 541-549-8070

February 15, 2001

Oregon Water Resources Department
158 12th St., NE
Salem, Oregon 97301-4172

To Whom It May Concern:

I am the Manager of the Squaw Creek Irrigation District (SCID). SCID is constructing the Cloverdale Ditch Piping Project, which has been authorized by the SCID Board. The Board has also authorized filing an application for allocation of conserved water for the water that will be saved as a result of this project.

All of the conserved water saved will come from transmission losses. As a result, SCID has the sole interest in the allocation of the conserved water except as stated in the conserved water agreement between SCID, DRC and OWT.

We have consulted with the public agencies that have an interest in the management of Squaw Creek Water (DRC, ODFW, OWRD and USFS). Each agency has expressed support for this project.

Very Truly Yours,

SQUAW CREEK IRRIGATION DISTRICT

Marc Thalacker, Manager

Exhibit K

Water Right Transfer Agreement

WATER RIGHTS TRANSFER AGREEMENT
for the
CLOVERDALE DITCH PIPING PROJECT
between
DESCHUTES BASIN RESOURCES CONSERVANCY
and
OREGON WATER TRUST
and
SQUAW CREEK IRRIGATION DISTRICT

1. Background and Purpose. The Squaw Creek Irrigation District (District), Deschutes Basin Resources Conservancy (DRC) and Oregon Water Trust OWT) enter into this Water Rights Transfer Agreement (the "Agreement") for the purpose of installing a distribution pipeline in the Cloverdale Ditch ("the Project") and transferring a certain portion of the water conserved thereby to an instream water right for Squaw Creek. The Project will provide several benefits to the District, the general public and the environment. The primary effect of piping the Cloverdale Ditch is to reduce water losses due to seepage. Other benefits of the Project may include eventual end of system spill savings. The primary effect of this seepage reduction is to improve the reliability of water delivery to District patrons, which will, in turn, improve economic activity. In turn, the District agrees to transfer a certain quantity of the water savings from this project to instream water rights through the Oregon Conserved Water Act, Oregon Revised Statutes (ORS) 537.455 – 500.

The parties desire to enter into this Agreement to set forth the terms and conditions of the DRC's agreement to contribute funding to the Project in exchange for the District's agreement to transfer a portion of its water right to an instream water right (as authorized by ORS Chapter 537.455 and pursuant to procedures established by the Oregon Water Resources Department in Oregon Administrative Rules (OAR) Chapter 690, Division 18.) The three parties to the Agreement will fulfill their obligations as a condition of Federal and State of Oregon funding.

2. The Project. The Project will replace approximately 14,880 feet of open ditch, known as the Cloverdale Ditch, with 24-inch diameter pipe for the purpose of decreasing water loss due to seepage. At full demand, the ditch delivers 21 cubic feet per second (cfs) to 15 farms. The District estimates water losses of four (4) to five (5) cfs during peak delivery periods. The Project proposes $400,000 of the funding will come from the District and the remaining $260,000 will come from the DRC.

3. Agreement to Provide Funding. The DRC agrees to provide $260,000 to the District as a contribution towards the cost of completing the Project.

Funding will be provided upon completion of all National Environmental Policy Act and DRC funding requirements as outlined in the DRC Terms and Conditions Contract (Attachment 1). The District shall achieve Project installation and determine the conserved water no later than May 1, 2001. The District shall maintain the Project at all times in a workpersonlike manner. The District agrees to reimburse the DRC the invoiced price per foot for any pipe that is not installed before May 1, 2001.

4. Transfer of Water Rights to Instream Water Right. In exchange for the DRC's contribution described above, the District agrees to the provisions set out in this section regarding the project completion and allocation of conserved water to an instream water right.

A. Water Rights Delivered Through the Cloverdale Ditch

The Cloverdale Ditch services a total of 1020.7 acres. The water rights delivered by the ditch are 3.1 cfs 1887, 0.2 cfs 1889, 15.3 cfs 1895 and 1.3 cfs 1904.

B. Conserved Water

The responsibilities of the parties are as follows:

The DRC agrees to: provide $260,000 to the District as a contribution to the cost of completing the Project in return for at least 3 cfs or one half of the conserved water from the Project, whichever is greater.

The District agrees to: sign the Conserved Water Application prepared by OWT described below no later than 60 days after disbursement of funds from the DRC. The Conserved Water Application will seek two allocations of conserved water. The first allocation will be to the State of Oregon for 3 cfs as an instream flow. Any water conserved in excess of 3 cfs will be included in the second allocation. The second allocation will allocate the next 3 cfs to the District. Any conserved water in excess of 6 cfs will be divided equally between the District and the instream flow right held by the State of Oregon.

OWT agrees to: prepare the Conserved Water Application. OWT will obtain the District's signature on said application and submit the application to the Oregon Water Resources Department (OWRD) for approval. OWT expressly makes no warranties or promises regarding OWRD's approval, rejection or modification of said application nor regarding the timeliness with which the application is reviewed and acted upon by OWRD.

The District further agrees that it will not exercise its right to request a decrease in the amount of conserved water as authorized in OAR 690-018-0062 subsection 2.

C. Determination of Conserved Water

The District Manager will determine the amount of water conserved by the Project immediately after project completion. The District Manager will measure flows at the Ditch headgate at Watson Reservoir at full operational capacity. Full operational capacity is defined as delivering 100% of the Cloverdale water rights described in section 4, part A. The Deschutes Basin Watermaster will review measurements to determine if standardized methods were used to assure accuracy. Measurement will be referenced with historical flow data recorded and collected by the District to determine conserved water. The priority dates of the conserved water will be allocated as follows: 16% of the conserved water will have an 1887 priority date, 4% will have an 1889 priority date, and 80% will have an 1895 priority date but will be distributed as outlined in section 4, part E.

D. Instream Water Right

In accordance with the terms of this Agreement, there will be allocated to the State of Oregon, Water Resources Department, an instream water right as per the conserved water statute defined in section 1, paragraph 1 and 2 of this agreement.

E. Operational Agreement

The Squaw Creek Irrigation District, for the benefit of the stream, agrees to distribute the 3 cfs instream water right, outlined in section 4, part B above, at all times in addition to meeting existing downstream demands. The Watermaster will use the Squaw Creek Irrigation District stream gauge # 14076000 and the Squaw Creek stream gauge # 14076050 for determining the required flows.

Any conserved water in excess of 6 cfs will be distributed to the District and the stream equally and by priority date in allocation as described in section 4, part C.

F. Project Completion

Project completion is defined as the date of installation and testing of the distribution pipeline, to occur no later than May 1, 2001, in the Cloverdale Ditch.

5. Term of the agreement. This agreement is effective on the date of the last signature and is perpetual.

6. District's Representations and Warranties. District represents and warrants that: (a) it has the authority to enter into this agreement; (b) that it has the authority to construct the Project; (c) its portion of the water right described in the Certificate is free and clear of liens, claims or encumbrances and (d) that the water rights subject to this Agreement are in all other respects valid and transferable.

7. Water Use. District shall comply with the limitations of the Instream Water Right and shall not pump, store, divert or use any waters of Squaw Creek described under the Instream Water Right or the Operational Agreement described above in section 4, part E.

8. Access. District grants DRC and its agents, employees and contractors, access to the Property for the purposes of installing any necessary water measuring or control devices, conducting any appropriate evaluations, and monitoring water use. DRC shall be permitted to install locks or other equipment necessary to prevent the water described in the Instream Water Right from being diverted by the District. Access shall be limited in time from 7:00 a.m. to 6:00 p.m., Monday through Friday, excluding holidays.

9. Default. Any deliberate interference by the District with the lawful orders of the Watermaster pertaining to the protection of the Instream Water Right or if the District attempts to use Squaw Creek water in violation of the Operational Agreement described in section 4, part E, above shall constitute a default. Additionally, default shall occur with failure to comply with any other term or condition or obligation within 30 days after written notice specifying the nature of the default. These terms, conditions and obligations include, without limitation, non-payment, refusal to sign an application, failure of representations and failure to transfer conserved water.

10. Time is of the Essence. Time is of the essence with respect to every obligation of this Agreement.

11. Remedies. In the event of default, DRC may withhold any remaining funds, shall be reimbursed for its expenditure and may pursue all other remedies available under applicable law.

12. Indemnities. District will indemnify and hold harmless DRC and OWT from and against any demand, claim or action arising out of or in any way related to District's breach of this Agreement, including without limitation, the failure of the representations and warranties made in this Agreement to be true; or arising out of or in any way related to any demand, claim or action brought by a District member; or arising out of or in any way related to any demand, claim or action challenging the District's authority to undertake the Project.

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14. Notices. Notices sent under this Agreement shall be in writing and sent by certified or registered mail, return receipt requested, postage prepaid to such party at

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16. Assignment. No Party shall assign its rights and obligations under this Agreement without the other Parties prior written consent, which consent shall not be unreasonably withheld.

No consent of the District will be required where the DRC and/or OWT might use the instream water right acquired pursuant to this Agreement to help develop and establish a "mitigation bank" or "water bank" for the purpose of facilitating further mitigation and ecosystem restoration in the Deschutes Basin. Such use may or may not involve an assignment of rights under this Agreement. In the event such assignments are made, the assignees shall not have a direct right of action against the District, but only against the DRC and/or the OWT.

17. Governing Law. This agreement shall be governed by and construed in accordance with the laws of the State of Oregon.

18. Waiver. The Parties do not intend that any right or remedy given to a Party on the breach of any provision under this Agreement be exclusive; each such right or remedy is cumulative and in addition to any other remedy provided in this Agreement or otherwise available at law or in equity. If the nonbreaching Party fails to exercise or delays in exercising any such right or remedy, the nonbreaching Party does not thereby waive that right or remedy. In addition, no single or partial exercise of any right, power, or privilege precludes any other or further exercise of a right, power, or privilege granted by this Agreement or otherwise.

19. Modification. This Agreement may not be modified or amended except by the written agreement of the parties. This Agreement may not be modified or amended orally.

20. Severability. If any term or provision of this Agreement or the application thereof to any person or circumstance shall to any extent be invalid or unenforceable, it shall not affect the other provisions hereof and the remainder of this Agreement shall be valid and enforceable to the fullest extent permitted by law and as though such invalid and or unenforceable provisions where omitted.

21. Integration. This Agreement, together with the DRC Terms and Conditions Contract, contains the entire agreement and understanding of the parties and supersedes all prior and contemporaneous agreements between them.

22. Successor Interests. This Agreement shall be binding upon and inure to the benefit of the assigns and successors in interest of each of the parties hereto.

Ron Nelson
Chairman
Deschutes Basin Resources Conservancy
1504 NW 3rd St.
Bend, OR 97701

9-20-2000
Date

Robert Lambert
Board Member
Squaw Creek Irrigation District
PO Box 2230
Sisters, OR 97759

9-19-2000
Date

Glen Cooper
Board Member
Squaw Creek Irrigation District
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Date

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9/19/00
Date

9/20/2000

Marc Thalacker
District Manager
Squaw Creek Irrigation District
PO Box 2230
Sisters, OR 97759

Date

9/21/2000

Andrew Purkey
Executive Director
Oregon Water Trust
111 S.W. Naito Parkway, Suite 404
Portland, OR 97204

Date

Exhibit L

Explanation of Conserved Water Allocation

EXHIBIT L

The water lost through seepage in the Cloverdale ditch was lost from serving water rights with various priority dates. Piping the Cloverdale Ditch and will conserve water with these various priority dates. The Squaw Creek Irrigation District has made the determination that the saved water should be allocated proportionately among three priority dates according to the same proportion that such rights are delivered through the Cloverdale ditch and pipeline, with the additional provision that the District will deliver the three cubic feet per second (cfs) of saved water at all times to instream use.

The proposed allocation is as follows:

1887 priority date (16%)	--	0.48 cfs
1889 priority date (4%)		0.12 cfs
1895 priority date (80%)		2.40 cfs
Total conserved water	**--**	**3.00 cfs**

Exhibit M

Cloverdale Ditch Seepage Loss Analysis

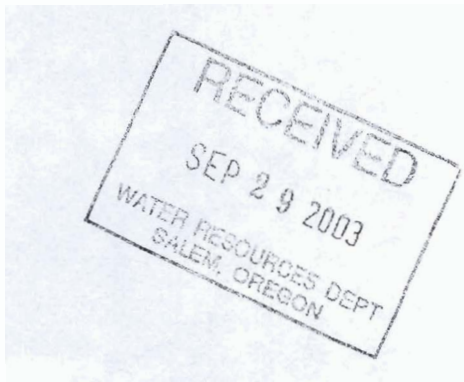


EXHIBIT M

Exhibit M contains the Cloverdale Ditch Seepage Loss Analysis, prepared by Elwin Ross, and signed off on by Bruce Estes and Kyle Gorman. Mr. Ross and Mr. Estes are both engineers with substantial training and experience in working with water delivery systems. Kyle Gorman is the Oregon Water Resources Department watermaster for District 11, which includes Squaw Creek.

The report analyzes the portion of the Cloverdale ditch that were piped by the Squaw Creek Irrigation District, in order to determine what the losses to seepage were in that section while it was unpiped.

Cloverdale Ditch Seepage Loss Analysis

Prepared for

Deschutes Resources Conservancy
Bend, OR

By

H & R Engineering, Inc.
Redmond, OR

Cloverdale Ditch Seepage Loss Analysis

Prepared for

Deschutes Resources Conservancy
Bend, OR

By

H & R Engineering, Inc.
Redmond, OR

Summary - Cloverdale Ditch Seepage Analysis

The following summary (including attachments, spreadsheets and charts), represents field data collected, analysis and display of data collected from SCID records, field flow measurements made, and seepage loss analysis and summary:

Step I. Attachment A, represents discussion on each flow measurement device on the Cloverdale Ditch.

Attachment B (spreadsheet), flow measurement were taken near the end of the pipeline (immediately downstream from the end of the backfill) just upstream from Camp Polk Road. An ultra sonic flow meter (by Elwin Ross) was used to measure the flow in the pipe. Kyle Gorman, Watermaster, provided a flow measurement in the ditch just downstream from Camp Polk Road. Measurements at all flowing turnouts were either observed or taken along the length of Cloverdale Ditch (by Marc Thalacker, Kyle Gorman & Elwin Ross, on 8-30-01; and Marc Thalacker, Bruce Estes, and Elwin Ross on 9-11-01).

Step II Obtain daily and weekly field record sheets from SCID files. This data was used for inflow-outflow analysis for past years (1996 – 2000), and to determine seasonal total ditch loss. Summaries and analyses were developed using high, medium and low inflows for all years.

Step III Attachment C, represents plots of flow vs time (years 1996 – 2000) for inflow into the Cloverdale Ditch at Watson Pond. These plots display the seasonal change in the inflow into the ditch throughout the season.

Attachment D, provides a summary of the estimated Cloverdale Ditch seepage loss in the reach from Watson Pond to Camp Polk Road.

Developed for DRC by: E. Elwin A Ross 9-26-01
Elwin A. Ross, H & R Engineering, Inc., Redmond, OR

Corroborated by: Bruce A. Estes 26 Sep 01
Bruce Estes, Estes Surveys, LLC, Bend, OR

Corroborated by: 9-26-01
Kyle Gorman, Watermaster, OWRD, Bend, OR

ATTACHMENT A

Flow Measuring Devices on Cloverdale Ditch[1/]

All of the flow measuring devices that were operating and measurements taken or flow readings taken, on 8-30-01, were observed by Kyle Gorman, Watermaster, OWRD, and Elwin Ross, H & R Engineering. Marc Thalacker, SCID Manager, provided the flow measurements on the crest of the Cipolletti weirs using the SCID weir stick, with close observation by Kyle Gorman and Elwin Ross. The last flow in the ditch was being delivered to Long (on 8-30-01). Flow measurements were again taken on 9-11-01 with Marc Thalacker, SCID Manager, Bruce Estes, Estes Surveys, & Elwin Ross, H & R Engineering. The last flow in the ditch was to Leason #2 (on 9-11-01).

Landowner	Meter Type	Discussion
Mansker	Aquamaster	Good installation, and apparent full pipe flow condition, Not flowing on 8-30-01 or 9-11-01
Stengel	McCrometer	Good installation, however not working, questionable whether full pipe flow condition exists. Not flowing on 8-30-01 or 9-11-01.
Main Pipeline @ Camp Polk Road	Aquamaster	Unsatisfactory operation, probably due to excessive air or excessive turbulence in upper portion of pipe. Not operating on 8-30-01 or 9-11-01
Christensen	Aquamaster	Good installation, and full pipe flow condition exists. Flowing on 8-30-01 & 9-11-01. Could not check flow using ultra sonic flow meter due to locations of pipe valve and elbow.
Cyrus (Home Pond)	C–3.0 weir	Reasonably good installation, however needs grass removed on north side of weir and accumulated sediment removed. Weir is not completely perpendicular. Use of the weir stick compensates for the apparent increased velocity. Flowing on 8-30-01 & 9-11-01

Check Structure & Cipolletti weirs (2 @ 3.0 ft each) in the main ditch at Cyrus's turnout. Weirs are not fully contracted and approach velocity is a little high, however not too bad. South weir blade is not a sharp crested edge, this giving a non-true head reading. Also leakage exists through the flash boards below the weir blades. Consensus – do not use the flow measured from this structure for seepage loss analysis in the ditch. Instead, use flow data as measured at the end of pipe at Camp Polk Road and individual delivery records.

York	Aquamaster	Full pipe flow condition exists, however questionable accuracy of meter. Use operating sprinkler head count, at 5 gpm flow each, to provide turnout flow. Five sprinkler heads operating on 8-30-01, seven heads operating on 9-11-01. This flow is part of Hurtley South.
Hurtley South	McCrometer	Appears to be full pipe flow condition and working properly. Flowing on 8-30-01 & 9-11-01
Hurtley Mid	Aquamaster	Meter not working at present. Use operating sprinkler head count at 5 gpm each, to provide turnout flow. Flowing on 8-30-01 but not flowing on 9-11-01
Hurtley North	McCrometer	Appears to be full pipe flow condition and working properly. Flowing on 8-30-01 & 9-11-01
Taylor	Aquamaster	Full pipe flow condition. Not operating on 8-30-01 or 9-11-01. Delivery is only at night.
Lester	McCrometer	Appears to be full pipe flow condition. Not operating on 8-30-01 or 9-11-01
Salmon	Weir – C-1.5	Weir may not have full contraction causing velocity to be a little high, however not too bad. Flowing on 8-30-01 & 9-11-01. Good location to install a 4 ft Cipolletti weir in the structure in the main ditch.
Leason #2	Aquamaster	Appears to be full pipe flow condition and working properly. Flowing on 8-30-01 & 9-11-01.
Leason #3	Weir – C-1.5	Needs reworked. Not flowing on 8-30-01 or 9-11-01
Richardson	Weir – C-1.0	Definitely needs maintenance to clean vegetation from stilling pool area. Flowing on 8-30-01 and 9-11-01.
McDougle	Weir – C-1.5	Appears to be working adequately. Flowing on 8-30-01, but not flowing on 9-11-01.
Paulus & McDougle	Weirs - C-1.0 ea	– Appears to work adequately. Flowing on 8-30-01, but not flowing on 9-11-01.
Long	Weir – C-2.0	Very turbulent, needs larger stilling well when flowing at maximum delivery. Requires taking several head measurements with weir stick to determine an average. Flowing on 8-30-01, but not flowing on 9-11-01.
Jeffers	Weir – C-1.0	Appears to work adequately. Not flowing on 8-30-01, not flowing on 9-11-01.

Weirs - All of the weir installations on the Cloverdale Ditch do not meet exact standards for Cipolletti weirs, as to having fully contracted conditions on the bottom and sides, however, use of the "weir stick" for measuring head over the weir blade compensates to some degree the increase in velocity. A rise in water surface results, i.e. roll up, on the weir stick when it is set on the weir blade at a 45 degree angle to the flow. The top of the rise is then recorded and flow is taken from a standard weir flow table for the given crest length of the weir, i.e. at H = 0.5, for a 1.5 ft length weir blade, Q = 1.78 cfs (or 3.56 AF/24 hr day).

Aquamaster flow meters – Where Aquamaster flow meters are apparently not now working, they should be removed and serviced before next irrigation delivery season. Several were not working, including the one on the main pipeline at Camp Polk Road. To operate adequately, the flow in the pipe must not be turbulent and must not contain excessive air bubbles. The glacial silts existing in the ditch flow during the late season of Sept 2001, may effect the bearings on the impeller.

McCrometer flow meters - All of the McCrometer flow meters appear to be working adequately, however the operating conditions may not be 100% satisfactory. The pipe must flow full. Most installations appeared to be good.

1/ Aquamaster – A pipeline flow meter. Full pipe flow without turbulence and air is necessary. Reads both instantaneous flow in gpm and accumulated total flow. For low flows, i.e. less than 40 gpm, it is necessary to install a short section of small diameter pipe in order to increase the velocity in the pipe so the impeller works satisfactory.

McCrometer – A pipeline flow meter, that measures velocity and then converts to gpm or cfs, and also accumulated total flow. Full pipe flow is necessary since the meter measures velocity in a full flowing pipe. Reads both instantaneous flow and accumulated total flow.

Cipolletti Weir – Sharp edged trapezoidal shaped weir. Standard condition requires a sharp edge, edges and bottom to be fully contracted, i.e. at 2 X head, and the head to be measured 4 X head upstream from weir blade. With less than 100% standard condition, excessive velocity generally occurs upstream from the weir blade. A "weir stick" can be used to measure head.

ATTACHMENT B

9-18-01

Squaw Creek Irrigation District

Cloverdale Ditch

8/30/01

	Actual Inflow	Turnout Flow	Balance	Loss	Loss	Kyle Gorman Check using Current meter
	cfs	cfs	cfs	cfs	%	cfs
Flow at end of pipeline	**10.90**					**11.2**
Christenson		1.00	9.90			
Cyrus		1.66	8.24			
Hurtley S		0.67	7.57			
Hurtley M		0.06	7.51			
Hurtley N		0.79	6.62			
Salmon		0.35	6.37			
Leason		1.89	4.48			
Richardson		0.07	4.41			
McDougle		0.07	4.34			
Paulus		0.58	3.76			
Long		0.35	3.41	3.41	31.3 %	

Flow at end of pipeline was measured using a Transit Time Ultrasonic Flowmeter. All other flows were measured or observed using existing SCID procedures with Cipolletti weirs or pipeline flow meters.

Reference for Cipolletti weir flow: USBR, Water Measurement Manual, 2nd (Table 10) & 3rd Edition (Table A7-5).

Distance from Camp Polk road to Long turnout is approximately 24,800 ft. Ave. Loss = .14 cfs/1000 ft

ATTACHMENT B1

9-18-01

Squaw Creek Irrigation District

Cloverdale Ditch

9/11/01

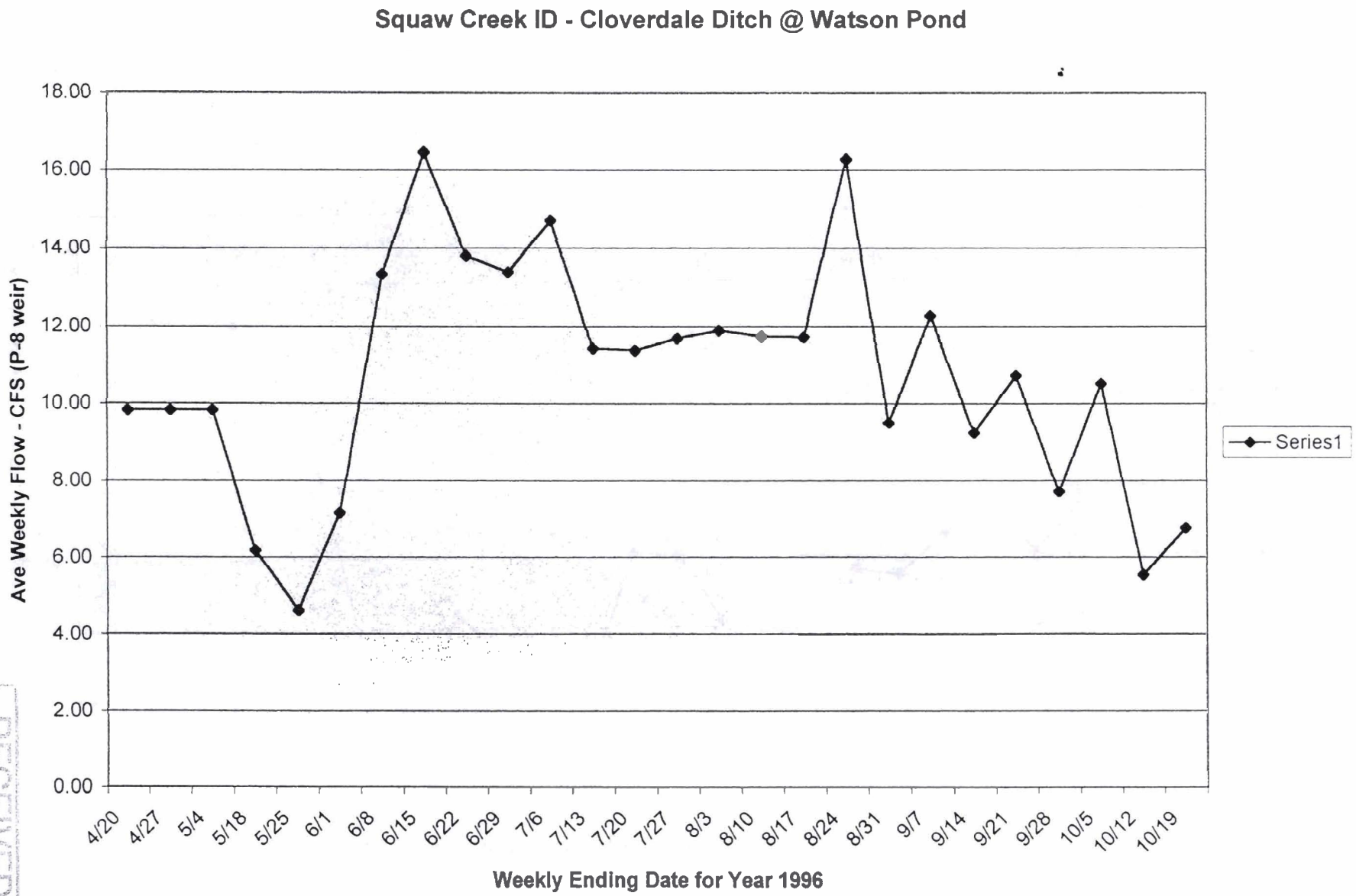
	Actual Inflow cfs	Turnout Flow cfs	Balance cfs	Loss cfs
Flow at end of pipeline	**5.60**			
Christenson		0.50	5.10	
Cyrus		1.66	3.44	
Hurtley S		0.40	3.04	
Hurtley N		0.89	2.15	
Salmon		0.32	1.83	
Leason #2		1.00	0.83	
Bypass		0.05		0.88

Flow at end of pipeline was measured using a Transit Time Ultrasonic Flowmeter. All other flows were measured or observed using existing SCID procedures with Cipolletti weirs or pipeline flow meters.

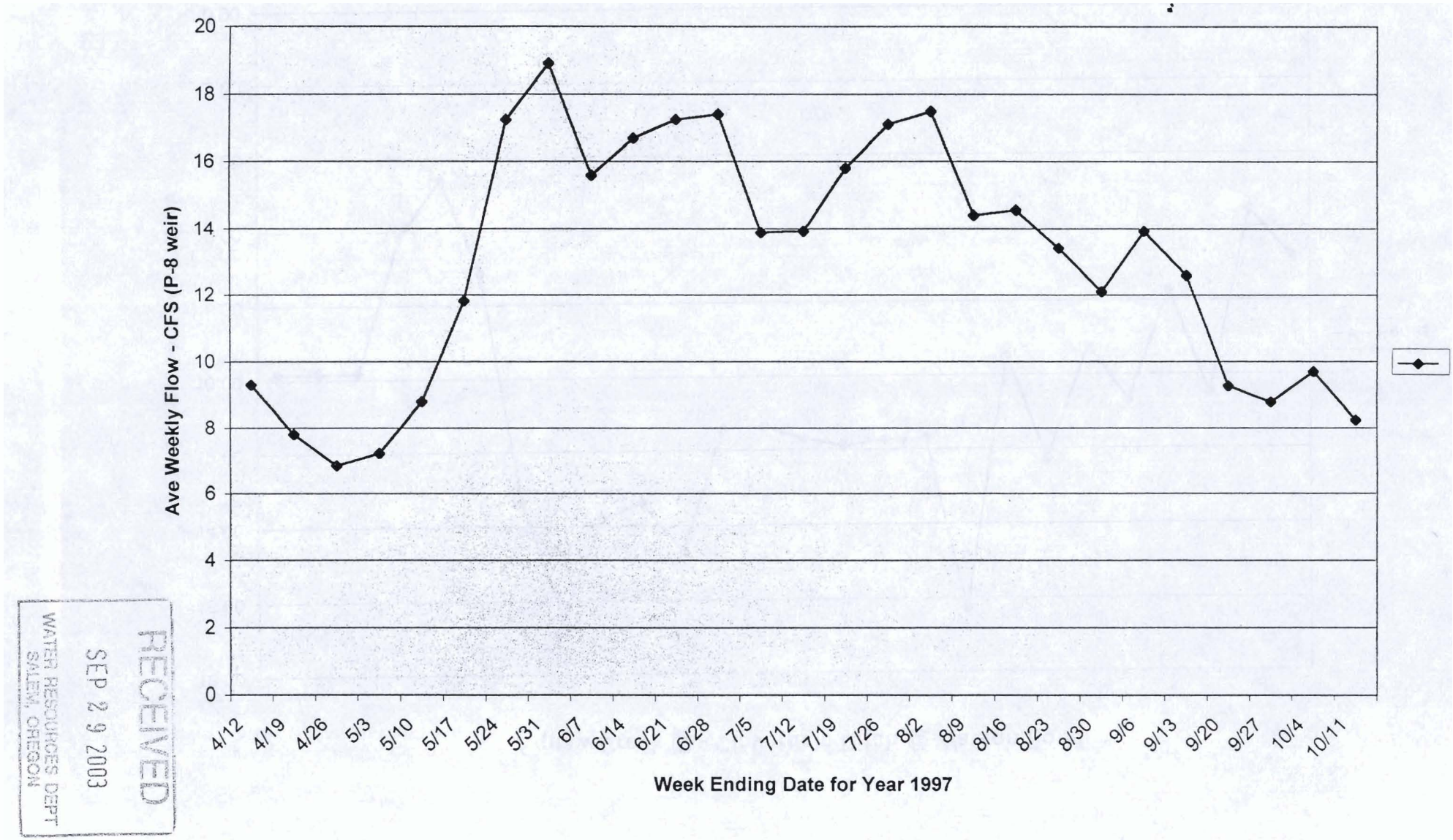
Reference for Cipolletti weir flow: USBR, Water Measurement Manual, 2nd (Table 10) & 3rd Edition (Table A7-5).

Attachment C

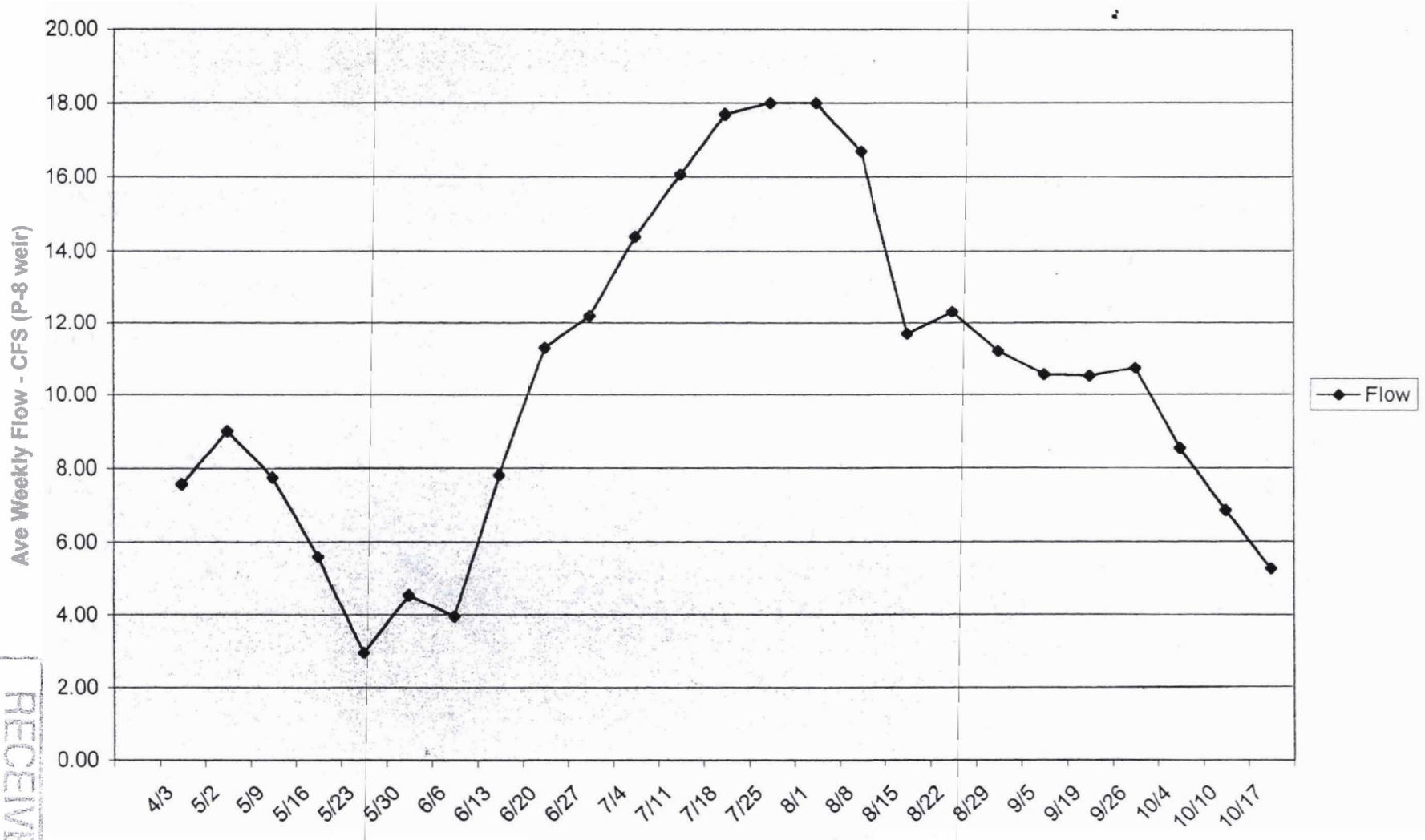
Plot of inflow into Cloverdale Ditch at Watson Pond for years, 1996, 1997, 1998, 1999, 2000



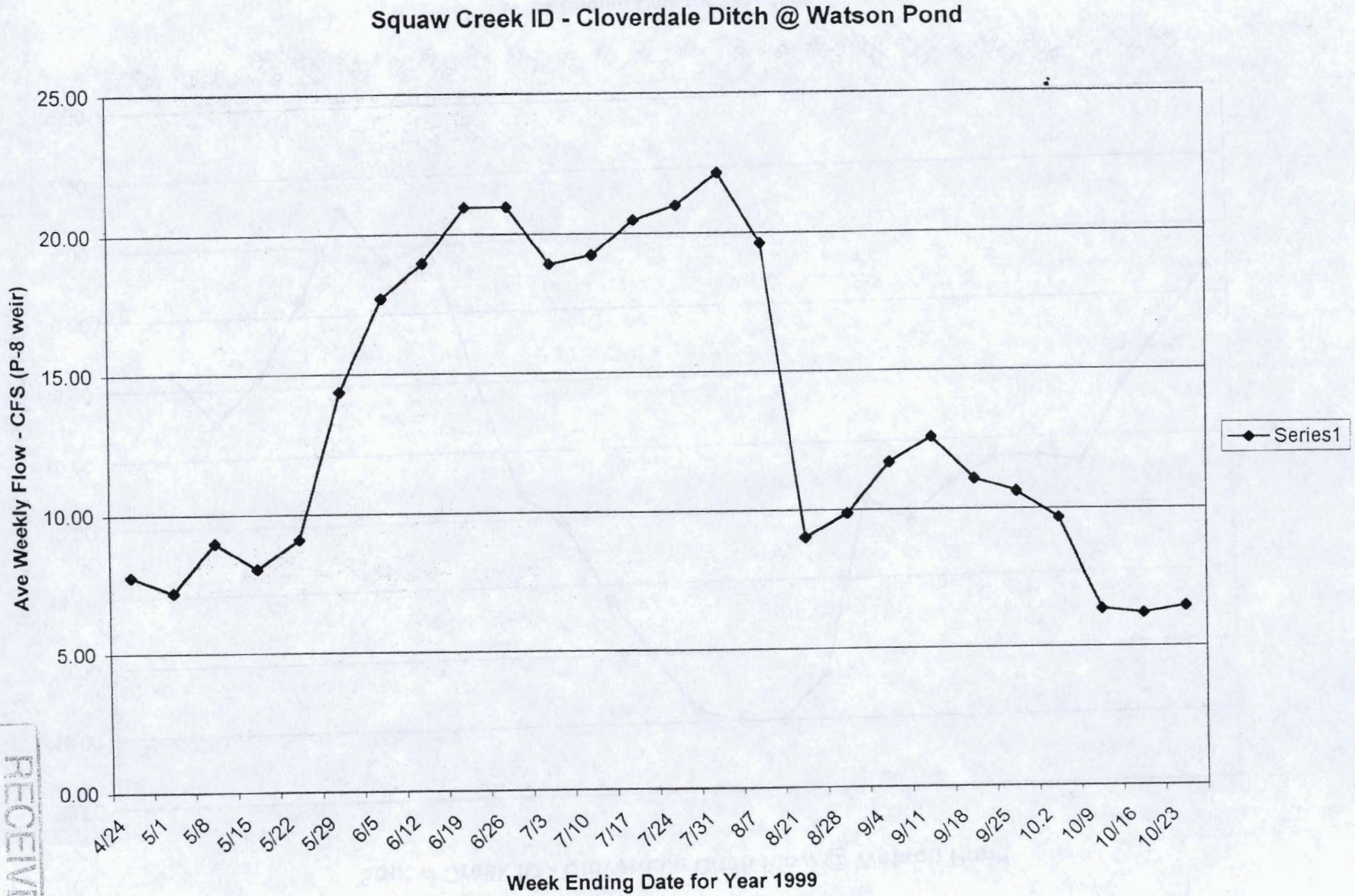
Squaw Creek ID - Cloverdale Ditch Flow @ Watson Pond



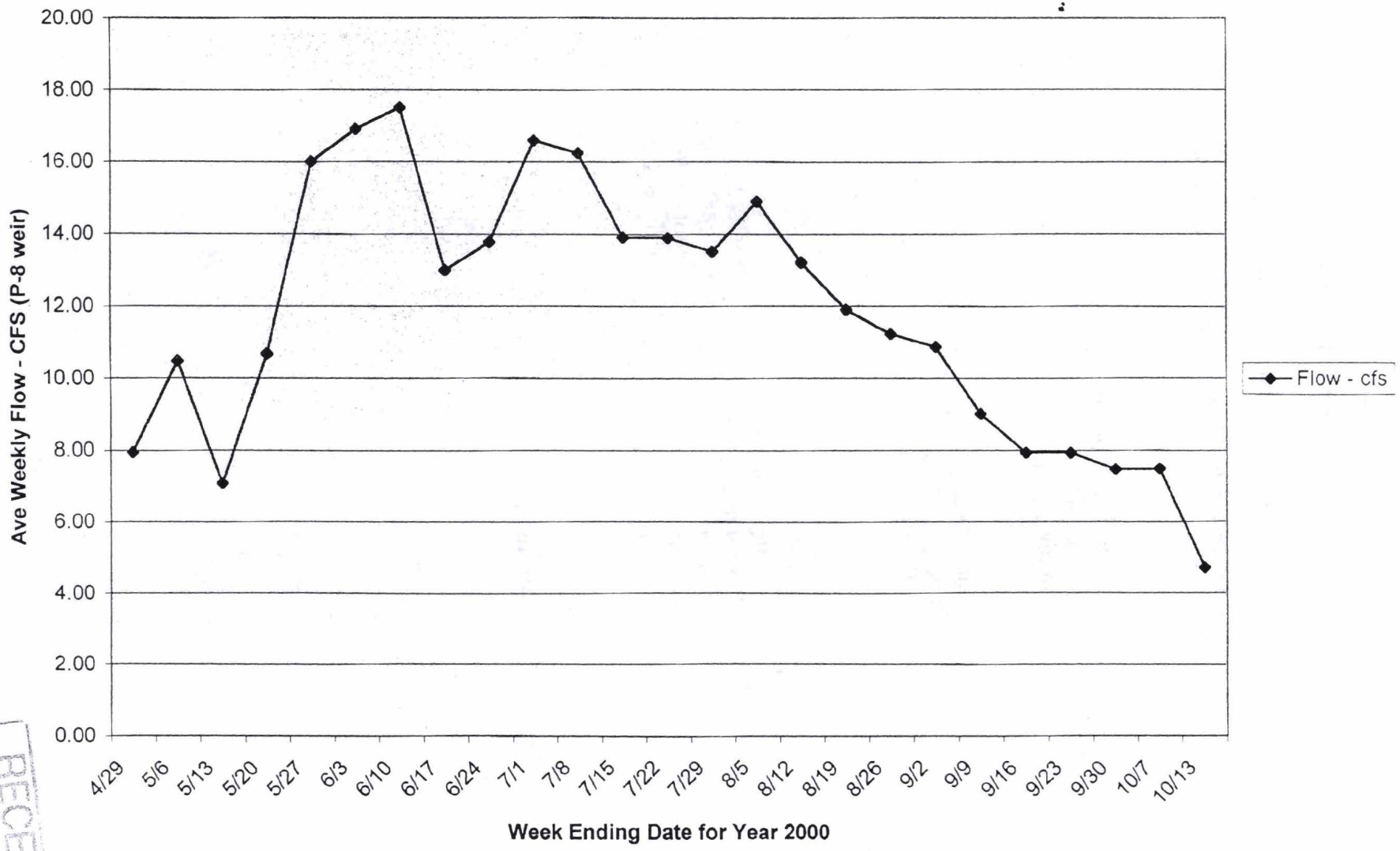
Squaw Creek ID - Cloverdale Ditch Flow @ Watson Pond



ATTACHMENT C



Squaw Creek ID - Cloverdale Ditch Flow @ Watson Pond



ATTACHMENT D

Summary - Seepage Loss Estimate

The following is the summary for determination and the conclusion of estimated loss in Cloverdale Ditch, based on flow measurements taken 8-30-01 & 9-11-01:

8-30-01	
Measured flow at end of pipeline at Camp Polk Road	**10.90 cfs**
Accumulated Flow at Turnouts in Ditch	**-7.49 cfs**
Balance (loss), based on inflow and turnouts	**3.41 cfs**
	(use 3.4)
(9-11-01)	
Measured flow at end of pipeline at Camp Polk Road	**5.60 cfs**
Accumulated Flow at Turnouts in Ditch	**-4.77 cfs**
Balance (loss), based on inflow and turnouts	**0.83 cfs**
Bypass	**0.05**
Total	**0.88**
	(user 0.9)

The 3.4 cfs (at medium flow range) and 0.9 cfs (at low flow range) values represent losses in the reach of the lower ditch (downstream from the end of the pipeline), at that specific measured inflow, for that day. These values were then used for the analysis of the estimated ditch loss in the pipeline reach. For lack of an actual flow measurement at the end of the pipeline at a high flow, the 3.4 cfs (used for medium flow range) loss is used for the high flow range analysis.

Average Loss Summary for Pipeline Reach:

Years of 1996 to 2000	Ave Flow	Average Loss
Low Flow	7.75 cfs	3.7 cfs
Medium Flow	11.95 cfs	2.8 cfs
High Flow	17.7 cfs	4.7 cfs
Weighted Average		3.9 cfs

Squaw Creek Irrigation District

Cloverdale Ditch Loss Analysis

9-18-01

Summary: Estimated loss in the Cloverdale Ditch, in the pipeline reach

1996	Range - cfs	Loss - cfs
Low Flow	5.5 - 9.8	2.8
Medium Flow -	10.5 - 12.3	2.0
High Flow	13.3 - 16.4	2.9
1997		
Low Flow	6.8 - 9.7	3.8
Medium Flow	11.8 - 13.4	3.9
High Flow	13.9 - 18.9	5.6
1998		
Low Flow	5.6 - 9.0	3.2
Medium Flow	10.5 - 12.3	1.7
High Flow	14.4 - 18.0	2.6
1999		
Low Flow	6.2 - 9.9	5.0
Medium Flow	10.6 - 12.6	3.6
High Flow	14.4 - 22.2	8.9
2000		
Low Flow	7.1 - 9.9	3.6
Medium Flow	10.5 - 13.0	3.0
High Flow	13.2 - 17.5	3.3

SUMMARY		Ave	1996	1997	1998	1999	2000	Ave	Weighted Ave
Flow Range	Range - cfs	cfs	Loss	Loss	Loss	Loss	Loss	Loss	Loss
Low Flow	5.5 - 9.9	7.75	2.8	4.0	3.2	5.0	3.6	3.7	
Medium Flow	10.5 - 13.4	11.95	2.0	3.9	1.7	3.6	3.0	2.8	3.9
High Flow	13.3 - 22.2	17.7	2.9	5.9	2.6	8.9	3.3	4.7	

NOTE: Data used for this analysis included, SCID's ditch riders records and SCID delivery records for the five years analyzed, for both turnout and delivery, thus giving a total ditch loss. Actual flow measurement at the end of the pipeline gave an actual loss value from the end of the pipeline to the end of the ditch. The difference provides the loss presented here. It was decided to use three different flow ranges, as it is assumed that losses are different at different flow levels, for example, losses are higher at higher flows and lower at low flows.
This was verified by actual flow checks at the end of the pipeline on 8-30 and 9-11, 2001.

Appendix

Cloverdale Ditch loss analysis: 1996, 1997, 1998, 1999, 2000

Squaw Creek Irrigation District

9-18-01

Cloverdale Ditch Loss Analysis

This table represents an approach that one might use to estimate the losses along the Cloverdale ditch.
There are, however, limitations with this approach. One can make an assumption about the loss with this approach only at the particular flow level they were made. We assume a loss in the lower portion of the ditch, below Camp Polk Road, to be 3.4 cfs, for medium flows, and 0.9 cfs for low flows. One must project some value to represent high flow ranges.
For lack of anything better, the 3.4 cfs was used.

1996

MEDIUM FLOWS - Range 10.5 - 12.3 cfs

Week ending	7/13	7/20	7/27	8/3	8/10	8/17	9/7	9/21	10/5	
Watson Ave Q	11.4	11.4	11.7	11.9	11.7	11.7	12.3	10.7	10.5	
Turnout - AF	158.8	160.0	163.8	166.6	164.4	163.6	176.1	151.0	149.6	
Delivery - AF	95.1	92.9	98.1	73.5	62.8	87.9	98.8	87.3	88.3	
Loss AF/day	9.1	9.6	9.4	13.3	14.5	10.8	11.0	9.1	8.8	
Loss cfs	4.6	4.8	4.7	6.7	7.3	5.5	5.6	4.6	4.4	
Pipe length loss-cfs	1.2	1.4	1.3	3.3	3.9	2.1	2.2	1.2	1.0	2.0

HIGH FLOWS - Range 13.3 - 16.4 cfs

Week ending	6/8	6/15	6/22	6/29	7/6	8/24	Ave
Watson Ave Q	13.3	16.4	13.8	13.4	14.7	16.3	
Turnout - AF	187	231.2	193.4	191.6	211.4	229.1	
Delivery - AF	108	145.2	121.3	113.1	119.1	109.8	
Loss AF/day	11.3	12.3	10.3	11.2	13.2	17.0	
Loss cfs	5.7	6.2	5.2	5.7	6.6	8.6	
Pipe length loss-cfs	2.3	2.8	1.8	2.3	3.2	5.2	2.9

Squaw Creek Irrigation District 9-18-01

Cloverdale Ditch Loss Analysis

This table represents an approach that one might use to estimate the losses along the Cloverdale ditch. There are, however, limitations with this approach. One can make an assumption about the loss with this approach only at the particular flow level they were made. We assume a loss in the lower portion of the ditch, below Camp Polk Road, to be 3.4 cfs, for medium flows, and 0.9 cfs for low flows. One must project some value to represent high flow ranges. For lack of anything better, the 3.4 cfs was used.

1997

MEDIUM FLOWS - Range 11.8 - 13.4 cfs

Week ending	5/17	8/30	8/23	9/13	Ave
Watson Ave Q	11.8	12.1	13.4	12.6	
Turnout - AF	170.6	171.9	186.4	149.1	
Delivery - AF	76.9	68.6	44.5	84.5	
Loss AF/day	13.4	14.8	20.3	9.2	
Loss cfs	6.7	7.4	10.2	4.7	
Pipe length loss-cf	3.3	4.0	6.8	1.3	3.9

HIGH FLOWS - Range 13.9 - 18.9cfs

Week ending	5/24	5/31	6/7	6/14	6/21	6/28	7/5	7/12	7/19	7/26	8/2	8/9	8/16	9/6	Ave
Watson Ave Q	17.25	18.9	15.6	16.7	17.2	17.4	13.9	13.9	15.8	17.1	17.5	14.4	14.6	13.9	
Turnout - AF	244.1	264.6	212.3	234.5	241.3	244.5	194.3	194.6	165.6	240.7	245.7	201.8	203.8	193.5	
Delivery - AF	130.4	133.3	94.9	127.8	115.2	128.3	70.4	68.1	93.3	67.5	56.1	48.9	82.0	118.1	
Loss AF/day	16.2	18.8	16.8	15.2	18.0	16.6	17.7	18.1	10.3	24.7	27.1	21.8	17.4	10.8	
Loss cfs	8.2	9.5	8.5	7.7	9.1	8.4	8.9	9.1	5.2	12.5	13.7	11.0	8.8	5.4	
Pipe length loss-cf	4.8	6.1	5.1	4.3	5.7	5.0	5.5	5.7	1.8	9.1	10.3	7.6	5.4	2.0	5.6

Squaw Creek Irrigation District

9-18-01

Cloverdale Ditch Loss Analysis

This table represents an approach that one might use to estimate the losses along the Cloverdale ditch. There are, however, limitations with this approach. One can make an assumption about the loss with this approach only at the particular flow level they were made. We assume a loss in the lower portion of the ditch, below Camp Polk Road, to be 3.4 cfs, for medium flows, and 0.9 cfs for low flows. One must project some value to represent high flow ranges. For lack of anything better, the 3.4 cfs was used.

1998

MEDIUM FLOWS - Range 10.5 - 12.3 cfs

Week ending	6/27	8/15	8/22	9/12	9/19	9/26	Ave
Watson Ave Q	12.2	11.69	12.3	11.6	10.5	10.7	
Turnout - AF	171.2	182.7	172.7	161.2	146.0	150.7	
Delivery - AF	112.2	95.7	85.3	100.6	80.2	89.7	
Loss AF/day	8.4	12.4	12.5	8.7	9.4	8.7	
Loss cfs	4.2	6.3	6.3	4.4	4.7	4.4	
Pipe length loss-cf	0.8	2.9	2.9	1.0	1.3	1.0	1.7

HIGH FLOWS - Range 14.4 - 18.0 cfs

Week ending	7/4	7/11	7/18	7/25	8/1	8/8	Ave
Watson Ave Q	14.4	16.1	17.7	18.0	18.0	16.7	
Turnout - AF	204.7	247.7	248.3	252.0	252.0	232.6	
Delivery - AF	135.7	149.9	169.2	163.1	175.1	145.5	
Loss AF/day	9.9	14.0	11.3	12.7	11.0	12.4	
Loss cfs	5.0	7.0	5.7	6.4	5.5	6.3	
Pipe length loss-cf	1.6	3.6	2.3	3.0	2.1	2.9	2.6

Squaw Creek Irrigation District

Cloverdale Ditch Loss Analysis

9-18-01

This table represents an approach that one might use to estimate the losses along the Cloverdale ditch. There are, however, limitations with this approach. One can make an assumption about the loss with this approach only at the particular flow level they were made. We assume a loss in the lower portion of the ditch, below Camp Polk Road, to be 3.4 cfs, for medium flows, and 0.9 cfs for low flows. One must project some value to represent high flow ranges. For lack of anything better, the 3.4 cfs was used.

1999

MEDIUM FLOWS - Range 10.6 - 12.6 cfs

Week ending	9/4	5/20	9/11	8/19	Ave
Watson Ave Q	11.7	12.6	11.1	10.6	
Turnout - AF	166.9	176.4	153.8	148.5	
Delivery - AF	67.2	82.4	60	46.7	
Loss AF/day	14.2	13.4	13.4	14.5	
Loss cfs	7.2	6.8	6.8	7.3	
Pipe length loss-cf	3.8	3.4	3.4	3.9	3.6

HIGH FLOWS - Range 14.4 - 22.2 cfs

Week ending	5/29	6/5	6/12	6/19	6/26	7/3	7/10	7/17	7/24	7/31	8/7	Ave
Watson Ave Q	14.4	17.7	19	21.0	21.0	18.9	19.2	20.5	21.0	22.2	19.6	
Turnout - AF	203.7	250.6	266.2	294.0	294.0	261.7	268.5	287.7	294.0	310.1	199.9	
Delivery - AF	59.9	93.9	111.3	90.4	116.9	81.1	104.5	112.5	112.7	103.0	65.4	
Loss AF/day	20.5	22.4	22.1	29.1	25.3	25.8	23.4	25.0	25.9	29.6	19.2	
Loss cfs	10.4	11.3	11.2	14.7	12.8	13.0	11.8	12.6	13.1	14.9	9.7	
Pipe length loss-cf	7.0	7.9	7.8	11.3	9.4	9.6	8.4	9.2	9.7	11.5	6.3	8.9

Squaw Creek Irrigation District 9-18-01

Cloverdale Ditch Loss Analysis

This table represents an approach that one might use to estimate the losses along the Cloverdale ditch. There are, however, limitations with this approach. One can make an assumption about the loss with this approach only at the particular flow level they were made. We assume a loss in the lower portion of the ditch, below Camp Polk Road, to be 3.4 cfs. for medium flows, and 0.9 cfs for low flows. One must project some value to represent high flow ranges. For lack of anything better, the 3.4 cfs was used.

2000

MEDIUM FLOWS - Range 10.5 - 13.0 cfs

Week ending	5/6	5/20	6/17	8/19	8/26	9/2	Ave
Watson Ave Q	10.5	10.7	13	11.9	11.2	10.9	
Turnout - AF	147.0	147.7	178.4	166.7	158.5	152.2	
Delivery - AF	66.0	45.5	70.1	83.8	78.4	76.8	
Loss AF/day	11.6	14.6	15.5	11.8	11.4	10.8	
Loss cfs	5.8	7.4	7.8	6.0	5.8	5.4	
Pipe length loss-cf	2.4	4.0	4.4	2.6	2.4	2.0	3.0

HIGH FLOWS - Range 13.2 - 17.5 cfs

Week ending	5/27	6/3	6/10	6/24	7/1	7/8	7/15	7/22	7/29	8/5	8/12	Ave
Watson Ave Q	16	16.9	17.5	13.8	16.6	16.2	13.9	13.9	13.5	14.9	13.2	
Turnout - AF	224.2	238.5	244.7	190.7	232.5	224.4	164.5	194.3	188.9	208.6	185.7	
Delivery - AF	103	128.8	122.9	124.3	119.3	133.4	102.9	107.9	96.9	123.7	115.5	
Loss AF/day	17.3	15.7	17.4	9.5	16.2	13.0	8.8	12.3	13.1	12.1	10.0	
Loss cfs	8.7	7.9	8.8	4.8	8.2	6.6	4.4	6.2	6.6	6.1	5.1	
Pipe length loss-cf	5.3	4.5	5.4	1.4	4.8	3.2	1.0	2.8	3.2	2.7	1.7	3.3