

TABLE 1
Alpine County - Lake Alpine Water Company
Water Rights Located Within the Bloods Creek Watershed as Shown on State Water Resources Control Board Spot Maps

Right	Owner	Source	Diversion Season	Use	Maximum Annual Use (af)
A13353	Sherman Acres Mutual Water Association	Unnamed tributary to Bloods Creek	6/1 to 9/1	4000 gallons/day	1.4
A20312	Lake Alpine Water Company	Bear Creek tributary to Bloods Creek	1/1 to 12/31	.075 cfs	54.3
A21485	Lake Alpine Water Company	Bear Creek tributary to Bloods Creek	10/1 to 6/1	Storage 240 af	140.0
A22291	Bear Alley Homeowners Association	Bear Creek tributary to Bloods Creek	1/1 to 12/31	DD of .05 cfs	3.2
A29813	Bear Alley Homeowners Association	Unnamed tributary to Corral Gulch thence Bloods Creek	1/1 to 12/32	7000 gallons/day	8.0
A31523	Lake Alpine Water Company	Bear Creek tributary to Bloods Creek	10/1 to 7/1	Storage 220 af DD of .78 cfs	395.0
S13730	James L Orvis & Bruce Orvis	Unnamed tributary to Bloods Creek	1/1 to 12/31	.067 cfs	48.5
S14798	Scott C. Parker	Unnamed tributary to Bloods Creek	3/1 to 10/1	150 gallons/day	0.1
				Total	650.5

TABLE 2
Alpine County - Lake Alpine Water Company
North Fork Stanislaus River
Water Right Filings As Indicated By SWRCB eWRIMS

Diverter	Application	License/ Permit	Direct Diversion Rate	Direct Diversion Season	Storage Season	Face Value Storage Amount (\$)	Source
Calaveras County Water District	S000249	-	1.08 cfs	Jan 1 - Nov 30	-	-	Big Trees Creek
Utica Power Authority	S000998	-	90 cfs	Jan 1 - Dec 31	-	-	North Fork Stanislaus River
Utica Power Authority	S000999	-	40 cfs	Jan 1 - Dec 31	-	-	Angels Creek
Utica Power Authority	S001000	-	5 cfs	Jan 1 - Dec 31	-	-	Angels Creek
Utica Power Authority	S001001	-	7 cfs	Mar 1 - Dec 31	-	-	Angels Creek
Calaveras County Water District	S001002	-	-	Jan 1 - Dec 31	-	4,117	Silver Creek
Calaveras County Water District	S001003	-	-	Jan 1 - Oct 31	-	3,130	North Fork Stanislaus River
Calaveras County Water District	S001004	-	-	Feb 1 - Oct 31	-	2,334	North Fork Stanislaus River
Oakdale Irrigation District	S004683	-	1816 cfs	Feb 1 - Dec 31	-	500	Stanislaus River
Utica Power Authority	S010401	-	88 cfs	Jan 1 - Dec 31	-	-	Mill Creek
Utica Power Authority	S011479	-	45 cfs	Jan 1 - Dec 31	-	-	French Gulch
Pacific Gas and Electric Company	A000077A	L9966	-	-	Nov 1 - Aug 1	4,062	Highland Creek
Oakdale Irrigation District & South San Joaquin Irrigation District	A001081	L2012	-	-	Oct 1 - July 1	96,195	Stanislaus River
South San Joaquin Irrigation District	A002524	L604	-	-	Sept 1 - May 1	36,000	Stanislaus River
Oakdale Irrigation District	A003091	-	-	-	Oct 1 - Jul 1	10,754	Stanislaus River
Oakdale Irrigation District	A005648A	-	-	-	Oct 1 - Jul 2	60,000	Middle Fork Stanislaus River
Lake Alpine Water Company	SFA 5648X - A031523	-	0.78 cfs	Oct 1 - July 31	Oct 1 - July 31	395	Bear Creek
Oakdale Irrigation District	A010872	L7856	-	-	Jan 1 - Dec 31	80,000	Stanislaus River
Oakdale Irrigation District	A010978	L3986	-	-	Dec 1 - May 1	25,000	Stanislaus River
Oakdale Irrigation District	A011105	L7857	-	-	Oct 1 - July 1	98,000	Middle Fork Stanislaus River
Calaveras County Water District	A011792B	P15013	-	-	Nov 1 - July 1	2,200	North Fork Stanislaus River
Oakdale Irrigation District	A012490	L10166	-	-	Oct 1 - July 1	76,300	Highland Creek
Oakdale Irrigation District	A012614	L7858	550 cfs	Jan 1 - Dec 31	Oct 1 - July 1	64,500	Stanislaus River
Oakdale Irrigation District	A012873	L10167	400 cfs	Jan 1 - Dec 31	Jan 1 - July 15	98,000	Middle Fork Stanislaus River
Calaveras County Water District	A012910	P15015	65 cfs	Mar 1 - July 1	-	64,500	North Fork Stanislaus River
Calaveras County Water District	A012911	P15016	400 cfs	Jan 1 - Dec 31	Nov 1 - July 1	2,200	North Fork Stanislaus River
Calaveras County Water District	A012912	P15017	7 cfs	Nov 1 - July 1	-	76,300	Highland Creek
Calaveras County Water District	A012912A	P14769	3 cfs	Nov 1 - July 1	-	-	North Fork Stanislaus River
Calaveras County Water District	A013091	P15018	-	-	Nov 1 - July 1	63,000	Highland Creek
Calaveras County Water District	A013092	P15019	-	-	Nov 1 - July 1	63,000	Highland Creek
Calaveras County Water District	A013093	P15020	-	-	Nov 1 - July 1	350	North Fork Stanislaus River
Oakdale Irrigation District	A013309	L7859	200 cfs	Jan 1 - Dec 31	-	49,700	Highland Creek
Oakdale Irrigation District & South San Joaquin Irrigation District	A013310	L7860	1500 cfs	Jan 1 - Dec 31	Jan 1 - Dec 31	80,000	Middle Fork Stanislaus River
U.S. Department of the Interior of Reclamation, Region 2	Bureau A14858B	P20245	2250 cfs	Nov 1 - June 30	-	1,000,000	Stanislaus River
U.S. Department of the Interior of Reclamation, Region 2	Bureau A14859	P16598	6000 cfs	Jan 1 - Dec 31	Nov 1 - June 30	980,000	Stanislaus River
Calaveras County Water District	A018727	P15021	640 cfs	Jan 1 - Dec 31	Nov 1 - July 1	-	North Fork Stanislaus River
Calaveras County Water District	A019148	P15023	60 cfs	Jan 1 - Dec 31	Nov 1 - June 30	25	Beaver Creek
Calaveras County Water District	A019148	P15023	600 cfs	Jan 1 - Dec 31	Nov 1 - June 30	52,000	North Fork Stanislaus River
Calaveras County Water District	A019148	P15023	340 cfs	Jan 1 - Dec 31	Nov 1 - June 30	-	Highland Creek
Calaveras County Water District	A019149	P15024	-	-	Nov 1 - June 30	37,000	North Fork Stanislaus River
U.S. Department of the Interior of Reclamation, Region 2	Bureau A19303	P16599	-	-	Nov 1 - June 30	12,700	Highland Creek
U.S. Department of the Interior of Reclamation, Region 2	Bureau A19304	P16600	-	-	Nov 1 - June 30	350	North Fork Stanislaus River
Lake Alpine Water Company	A020312	L010840	0.75 cfs	Jan 1 - Dec 31	-	-	Stanislaus River
Lake Alpine Water Company	A021485	L011007	0.05 cfs	Jan 1 - Dec 31	Oct 1 - June 1	240	Unnamed Springs
Oakdale Irrigation District & South San Joaquin Irrigation District	A026791	P19046	1800 cfs	Jan 1 - Dec 31	-	-	Bear Creek
U.S. Department of the Interior of Reclamation, Region 2	Bureau A27319	P20246	4000 cfs	Jan 1 - Dec 31	-	-	Stanislaus River
Stockton East Water District	A030603	-	750 cfs	Nov 1 - June 30	Nov 1 - June 30	155,000	Stanislaus River
Oakdale Irrigation District	A031502	P21188	170 cfs	Jan 1 - Dec 31	-	50,000	Middle Fork Stanislaus River

Note:

Highlighted records indicate water right claims Senior to State Filed Application 5648 and downstream of LAWC/County of Alpine Point of Diversion.

TABLE 3
Alpine County - Lake Alpine Water Company
Stanislaus River - Goodwin (SNS), Full Natural Flow
October 1901 Through June 2008⁽¹⁾

Month	OID/SSJID Pre-1914 Claim 1,816.6 cfs ⁽²⁾ (cfs)	Monthly Average ET _o , Oakdale, CA Station ⁽³⁾ (in)	Estimated Potential Irrigation Demand ⁽⁴⁾ (cfs)	Maximum Potential Impairment Caused by LAWC ⁽⁵⁾ (af)	Average Flow at SNS (cfs)	Potential Average Diversion (cfs)	Potential Average Volume Diverted (af)
October	1,816.6	3.37	779.9	NHC	168	168	10,350
November	ND	ND	ND	ND	424	424	25,246
December	ND	ND	ND	ND	807	807	49,605
January	ND	ND	ND	ND	1,376	1,376	84,629
February	ND	ND	ND	ND	1,777	1,777	98,710
March	1,816.6	3.43	793.8	4.4	2,286	794	48,806
April	1,816.6	5.24	1,212.6	1.3	3,419	1,213	72,155
May	1,816.6	6.70	1,550.5	3.6	4,746	1,550	95,335
June	1,816.6	7.40	1,712.5	13.9	3,189	1,712	101,899
July	1,816.6	7.85	1,816.6	NHC	965	965	59,314
August	1,816.6	6.75	1,562.0	ND	223	223	13,708
September	1,816.6	4.93	1,140.9	ND	117	117	6,946
Total				23.2			666,703
Mar-Oct				23.2			408,513

Maximum LAWC Impairment at Goodwin: 23.2/408,513 = 0.006%

Notes:

- ⁽¹⁾ As reported by DWR on CDEC website (http://cdec.water.ca.gov/cgi-progs/stationInfo?station_id=SNS), accessed June 2008.
- ⁽²⁾ Direct diversion right claimed by OID/SSJID and confirmed by 1929 Decree.
- ⁽³⁾ As reported by California Irrigation Management Information System (CIMIS) June 2008.
- ⁽⁴⁾ Monthly Irrigation Demand based on ratio of potential ET_o for a specific month, and July, multiplied by the maximum diversion of 1,816.6 cfs.
- ⁽⁵⁾ Potential impairment assumed to be maximum direct diversion rate 0.78 cfs; NHC: No Hydraulic Connection between P.O.D. and Goodwin; ND: Outside Diversion Season.

TABLE 4
Alpine County - Lake Alpine Water Company
Estimated Flow of North Fork Stanislaus River at S000998⁽¹⁾ Based on Flow in
Merced River at Pohono Bridge Near Yosemite, CA
Water Years 1917 Through 2007

Month	Average Flow at S998 (cfs)	Potential Average S998 Diversion (cfs)	S998 Diversion Potential Average Volume (acre-feet)
October	33	33	2,015
November	64	64	3,829
December	98	88	5,411
January	110	88	5,411
February	134	88	4,887
March	233	88	5,411
April	598	88	5,236
May	1,272	88	5,411
June	1,034	88	5,236
July	347	88	5,411
August	80	80	4,897
September	34	34	2,038
Total			55,194
Nov-Jul			46,244

Notes:

⁽¹⁾ Statement 998 filed by Utica Power Authority for claim of pre-1914 right at Utica Ditch (88 cfs by 1929 decree).

TABLE 5
Alpine County - Lake Alpine Water Company
Monthly Average Discharge at Selected Points of Interest
(all values in acre-feet)

Point of Interest	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct-Jul Total	Annual Total
Reported - Goodwin Dam Watershed														
Stanislaus River - Goodwin (SNS), Full Natural Flow ⁽¹⁾	10,350	25,246	49,605	84,629	99,550	140,589	203,459	291,800	189,734	59,314	13,708	6,946	1,154,276	1,174,931
USGS 11294500 North Fork Stanislaus River Near Avery, CA	5,976	8,622	14,757	16,868	19,639	31,792	56,718	86,222	45,264	11,869	6,777	5,996	297,727	310,501
Synthesized														
S000998 Utica Power Authority POD at McKay's Point ⁽²⁾	2,015	3,829	6,015	6,786	7,513	14,336	35,605	78,184	61,507	21,317	4,897	2,038	237,109	244,045
S000998 Utica Power Authority POD at McKay's Point ⁽³⁾	2,591	4,925	7,736	8,727	9,662	18,437	45,790	100,549	79,102	27,415	6,298	2,621	304,937	313,856
Bloods Creek Above Confluence with Bear Creek ⁽⁴⁾	56	107	168	189	210	400	994	2,183	1,717	595	137	57	6,619	6,813
Bear Creek at Bear Lake Dam ⁽⁵⁾	15	28	44	49	55	104	258	567	446	155	36	15	1,720	1,771
Reported - Merced River														
USGS 11266500 Merced River at Pohono Bridge Near Yosemite, CA	3,750	7,127	11,196	12,630	13,983	26,682	66,267	145,513	114,475	39,674	9,114	3,793	441,298	454,205

Notes:

- ⁽¹⁾ As reported by DWR on CDEC website (http://cdec.water.ca.gov/cgi-progs/stationInfo?station_id=SNS), accessed June 2008.
- ⁽²⁾ Estimated based on a watershed area ratio with USGS 11266500 Merced River at Pohono Bridge Near Yosemite, CA.
- ⁽³⁾ Calculated based on a double mass relationship between NFSR Near Avery and Merced River (Figure 2).
- ⁽⁴⁾ Calculated based on a double mass relationship with USGS 11266500 Merced River at Pohono Bridge Near Yosemite, CA.
- ⁽⁵⁾ Estimated based on a watershed area ratio with calculated Bloods Creek flow above Bear Creek.

TABLE 6
Lake Alpine Water Company
Change in Evaporation between
New Melones and Old Melones Reservoirs

Water Year	Annual Evaporation (acre-feet)		
	New Melones	Old Melones	Difference
1980	14,626	11,155	3,471
1981	17,530	13,298	4,232
1982	38,352	12,054	26,299
1983	52,264	11,693	40,571
1984	59,429	13,636	45,793
1985	50,053	12,233	37,820
1986	55,576	12,480	43,095
1987	53,011	13,474	39,537
1988	44,509	13,610	30,899
1989	33,331	12,849	20,482
1990	25,936	12,789	13,147
1991	19,601	12,692	6,909
1992	13,921	11,735	2,186
1993	22,315	11,218	11,097
1994	25,514	12,264	13,250
1995	36,366	10,822	25,544
1996	54,909	12,369	42,540
1997	53,740	12,390	41,350
1998	44,708	9,785	34,923
1999	47,954	11,026	36,928
2000	50,479	11,810	38,669
2001	48,288	12,038	36,250
2002	43,813	12,062	31,751
2003	40,417	11,537	28,881
2004	44,176	13,088	31,088
2005	44,364	10,809	33,555
2006	52,506	11,325	41,181
2007	47,024	11,653	35,371
2008*	21,380	5,971	15,409
1980-2007 Total	1,134,714	337,894	796,820
1980-2007 Average	40,526	12,068	28,458
Requested Lake Alpine Diversions	395	395	395
Percent of Evaporative Losses	0.97%	3.27%	1.39%

Notes:

Record runs through June 15, 2008.