

**UNITED STATES DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION**

**CENTRAL VALLEY OPERATIONS OFFICE**

**REPORT OF OPERATIONS**



November 2003

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INDEX

	<u>Page Number</u>
Summary of November 2003 .....	1

TABLES

	<u>Table Number</u>
Reservoir Storage Summary .....	1
Power System Generation Summary .....	2
Shasta Lake Daily Operations .....	3
Trinity Lake Daily Operations .....	4
Whiskeytown Lake Daily Operations .....	5
Lewiston Lake Daily Operations .....	6
Spring Creek Debris Dam Daily Operations .....	7
Keswick Reservoir Daily Operations .....	8
Red Bluff Diversion Reservoir Daily Operations .....	9
Black Butte Reservoir Daily Operations .....	10
Folsom Lake Daily Operations .....	11
Lake Natoma Daily Operations .....	12
New Melones Daily Operations .....	13
Goodwin Reservoir Daily Operations .....	14
Millerton Lake Daily Operations .....	15
State-Federal Sacramento-San Joaquin Delta Outflow .....	16
Consolidated State-Federal San Luis Reservoir Daily Operations .....	17
Consolidated State-Federal O'Neill Forebay Daily Operations ...	18
Federal-State San Luis Operations .....	19
Federal-State Operations .....	20
Monthly Diversions in Acre-Feet, 2003 .....	21
Monthly Deliveries - Friant-Kern Canal, 2003 .....	22
Monthly Deliveries - Madera Canal and Millerton Lake, 2003 ....	23
Monthly Deliveries - San Joaquin River and Mendota Pool, 2003 .	24
Monthly Deliveries - Delta-Mendota Canal, 2003 .....	25
Monthly Deliveries - San Luis and Cross Valley Canal, 2003 ....	26
Monthly Deliveries - Tehama-Colusa Canal, 2003 .....	27
Monthly Deliveries - Sacramento River, 2003 .....	28
Streamflow Data - Sacramento-San Joaquin Valleys, 2003 .....	29

## SUMMARY OF NOVEMBER 2003 OPERATIONS

Sacramento had an average monthly temperature of 52.9 °F which was 2.2 °F below normal. The average temperature at Shasta Dam was 50.0 °F which was 2.4 °F below normal and Huntington Lake was 2.2 °F below normal with an average temperature of 38.0 °F.

Trinity System: Storage in Trinity Lake decreased 28,400 acre-feet this month to 1,700,600 acre-feet, which is 69 percent of capacity and 119 percent of the 15 year average for this date. The total inflow for the month was 29,905 acre-feet. The Trinity River release was 300 ft<sup>3</sup>/s for the month. Whiskeytown Lake was operated between elevations 1198.07 feet and 1207.54 feet with an end-of-month storage of 206,500 acre-feet. The releases to Clear Creek from Whiskeytown Dam were 200 ft<sup>3</sup>/s. Total diversion from the Trinity River to the Sacramento River watershed for the month was 44,036 acre-feet.

Shasta-Keswick: Storage in Shasta Lake decreased 600 acre-feet for an end-of-month storage of 3,090,200 acre-feet, which is 68 percent of capacity and 122 percent of the 15 year average. The total inflow for the month was 263,105 acre-feet. The release to the Sacramento River at Keswick ranged between 5,000 and 7,000 ft<sup>3</sup>/s for the month.

Folsom-Nimbus: Storage in Folsom Lake decreased 62,900 acre-feet and had an end-of-month storage of 499,000 acre-feet, which is 51 percent of capacity and 127 percent of the 15 year average for this date. The total inflow for the month was 75,367 acre-feet. The release to the American River at Nimbus ranged between 2,000 and 2,500 ft<sup>3</sup>/s during the month.

New Melones: Storage in New Melones increased 10,100 acre-feet for an end-of-month storage of 1,275,700 acre-feet or 53 percent of capacity and 107 percent of the 15 year average. The release to the Stanislaus River at Goodwin Dam was 250 ft<sup>3</sup>/s for the month. The total inflow for the month was 27,979 acre-feet.

Delta-San Luis: Federal storage in San Luis Reservoir on November 30, 2003, was 509,000 acre-feet compared to the storage a year ago of 568,000 acre-feet.

Friant: Storage in Millerton Lake increased 7,387 acre-feet to 218,400 acre-feet. The total monthly inflow was 30,528 acre-feet. The release to the San Joaquin River at Friant varied between 130 and 161 ft<sup>3</sup>/s.

CVP Totals: The total diversions to CVP canals were 278,248 acre-feet. The November 30, 2003, storage in the 18 CVP reservoirs was 7,075,000 acre-feet compared to storage 1 year ago of 6,046,000 acre-feet.

Power: Gross power production for the CVP totaled 237,342 kilowatt-hours.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF RECLAMATION  
MID-PACIFIC REGION  
MONTHLY RESERVOIR STORAGE SUMMARY IN ACRE-FEET  
(PRELIMINARY DATA SUBJECT TO REVISION)

Table 1

WATERSHED	RESERVOIR	TOTAL CAPACITY	11/30/2003	11/30/2002	WATERSHED	RESERVOIR	TOTAL CAPACITY	11/30/2003	11/30/2002
KLAMATH	CLEAR LAKE *	526,800	NR	103,230	AMERICAN	FOLSOM LAKE *CVP	1,010,300	498,990	446,480
	GERBER *	94,300	13,800	13,840		LAKE NATOMA *CVP	9,030	8,200	8,110
	UPR KLAMATH LK *	873,300	172,170	192,740	COSUMNES	JENKINSON LK *CVP	41,000	29,430	26,690
TRINITY	CLAIR ENGLE LK*CVP	2,447,700	1,700,560	1,392,650	MOKELUMNE	CAMANCHE	431,500	282,310	248,860
	LEWISTON LAKE*CVP	14,660	14,040	14,020		PARDEE	210,000	167,700	171,840
	WHISKEYTOWN *CVP	241,100	206,540	206,040	SALT SPRINGS	140,000	48,500	57,850	
MCCLOUD	MCCLOUD DIV. RES	35,230	26,260	20,040	CALAVERAS	NEW HOGAN	317,100	98,890	122,120
PIT	IRON CANYON	24,240	16,780	12,330		NEW MELONES*CVP	2,420,000	1,275,710	1,304,230
	LAKE BRITTON	40,620	35,330	34,060		BEARDSLEY	97,800	71,290	50,080
	PIT NO. 6	15,890	14,280	13,980	STANISLAUS	DONNELLS	64,320	23,670	9,120
	PIT NO. 7	34,610	33,030	32,850	TULLOCH	67,000	54,550	54,550	
SACRAMENTO	SHASTA LAKE *CVP	4,552,000	3,090,200	2,334,940	TUOLUMNE	LAKE ELEANOR	26,100	19,780	13,540
	SPRING CREEK *CVP	5,900	1,190	830		LAKE LLOYD	268,000	208,750	213,790
	KESWICK *CVP	23,800	22,130	22,740		HETCH-HETCHY	360,400	236,370	245,040
	RED BLUFF DIV *CVP	3,920	310	300	NEW DON PEDRO	2,030,000	144,060	1,246,630	
FEATHER	OROVILLE	3,538,000	2,072,280	1,227,430	TURLOCK LAKE	49,000	18,180	1,440	
	THERMALITO DIV RES	13,500	12,910	13,000	MERCED	EXCHEQUER	1,024,600	381,400	299,030
	THERMALITO FORE.	14,400	10,730	10,970	CHOWCHILLA	BUCHANAN	150,000	17,090	10,870
	THERMALITO AFTER.	57,000	29,000	20,120	CRANE VALLEY	45,400	21,910	24,720	
STONY CREEK	LAKE ALMANOR	1,143,000	792,270	714,530	LAKE T.A. EDISON	125,000	51,230	48,860	
	EAST PARK *	50,900	42,230	7,280	FLORENCE LAKE	64,600	1,080	1,000	
	STONY GORGE *	50,000	33,930	22,010	SAN JOAQUIN	MAMMOTH POOL	122,700	15,730	31,710
PUTAH CREEK	BLACK BUTTE *CVP	143,700	32,840	23,420	HUNTINGTON LAKE	89,800	42,690	52,380	
	LAKE BERRYESSA *	1,602,300	1,405,400	1,263,980	REDINGER LAKE	35,000	25,190	24,380	
YUBA	LAKE SOLANO *	720	630	590	SHAVER LAKE	135,400	125,110	114,380	
	BULLARDS BAR	930,000	583,440	492,990	MILLERTON LK *CVP	520,500	218,420	252,310	
	SO. YUBA SYSTEM	146,000	NR	39,280	FRESNO	HIDDEN	90,000	9,690	11,750
BEAR	ROLLINS	65,990	57,410	61,530	SAN LUIS **CVP	2,040,600	1,122,520	787,570	
LITTLE TRUCKEE	STAMPEDE *	226,620	137,000	109,200	O'NEILL FORE.**CVP	56,400	42,740	41,530	
	BOCA *	41,140	4,600	4,000	SAN LUIS	L BANOS RES**CVP	34,560	18,900	18,620
PROSSER	PROSSER CREEK *	29,840	9,700	7,700	LT PANOCHE **CVP	5,580	660	730	
TRUCKEE	LAKE TAHOE *	732,000	0	20,600	OIL CANYON	CONTRA LOMA *CVP	2,100	1,620	1,990
	RYE PATCH *	190,000	10,800	11,600	KINGS	WISHON	128,300	45,250	52,070
HUMBOLDT					PINE FLAT	1,001,500	170,880	217,370	
CARSON	LAHONTAN *	317,280	90,700	90,200	KAWEAH	TERMINUS	143,000	9,590	12,140
	TWIN LAKES	21,600	13,750	15,110	TULE	SUCCESS	82,300	6,130	12,000
	FRENCH MEADOWS	136,400	67,390	68,970	KERN	ISABELLA	588,100	149,000	134,540
					CUYAMA	TWITCHHELL *	240,100	NR	5,160
AMERICAN	HELL HOLE	207,590	127,470	116,890	SANTA YNEZ	LAKE CACHUMA *	190,500	109,340	124,050
	LOON LAKE	76,500	33,740	59,410	COYOTE	LAKE CASITAS *	254,000	159,440	194,960
	ICE HOUSE	46,000	28,930	30,890	<b>Total - 85 Reservoirs</b>		<b>33,790,040</b>	<b>17,121,530</b>	<b>15,738,220</b>
	UNION VALLEY	277,300	166,630	138,450	<b>Total - 36 USBR Reservoirs</b>		<b>18,992,650</b>	<b>10,474,740</b>	<b>9,054,340</b>
	SLAB CREEK	16,600	15,440	14,100	<b>Total - 18 CVP Reservoirs</b>		<b>13,572,850</b>	<b>8,285,000</b>	<b>6,883,200</b>

\*\* - Joint State-Federal Reservoir

\* - USBR Reservoir

CVP - Central Valley Project

NR - Not Reported

## Plant Generation and Energy Summary for 2003

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b><u>Generation in mwh</u></b>													
<b>Shasta</b>													
Gross	278597	175909	62560	134213	310672	282701	315692	189329	115826	103888	98192		2,067,579
Net	278111	175634	62415	134148	310579	282579	315526	189193	115680	103567	97790		2,065,222
<b>Keswick</b>													
Gross	55128	38974	19917	28206	57454	54658	57746	44195	32516	28884	23514		441,192
Net	54975	38787	19787	27923	57320	54532	57618	44069	32390	28755	23370		439,526
<b>Trinity</b>													
Gross	5793	30013	31356	18379	86019	87879	64914	76896	72894	55472	20888		550,503
Net	5503	29837	31166	18200	85820	87748	64799	76768	72776	55374	20779		548,770
<b>JF Carr</b>													
Gross	1299	36119	33295	15518	44017	56560	50310	78288	74465	66867	21146		477,884
Net	1158	35993	33208	15440	43866	56446	50222	78180	74366	66775	21080		476,734
<b>Spring Creek PP</b>													
Gross	40240	41694	45430	23752	58145	55387	47246	77681	70514	63000	32548		555,637
Net	40073	41552	45293	23628	58003	55259	47132	77546	70398	62891	32454		554,229
<b>Folsom</b>													
Gross	43899	62787	32736	34784	96407	72312	62073	48396	30638	34378	32978		551,388
Net	43692	62621	32554	34616	96234	72107	61880	48226	30448	34203	32777		549,358
<b>Nimbus</b>													
Gross	5709	7685	4185	4071	9870	7518	7110	5682	3785	4316	4140		64,071
Net	5668	7644	4142	4049	9851	7494	7099	5666	3764	4299	4119		63,795
<b>New Melones</b>													
Gross	6308	12196	30784	44387	52957	67830	55169	46551	27630	12905	3938		360,655
Net	6213	12101	30680	44253	52813	67671	55018	46412	27508	12784	3835		359,288
<b>O'Neill</b>													
Gross	0	0	0	523	2016	102	501	144	0	0	0		3,286
Net	0	0	0	435	2022	7	308	30	0	0	0		2,802
<b>Fed San Luis</b>													
Out Meter	0	0	0	17820	0	14257	44089	19588	1288	0	0		97,042
<b>Gross Generation</b>	436,973	405,377	260,263	321,653	717,557	699,204	704,850	586,750	429,556	369,710	237,344	0	5,169,237
<b>Net Generation</b>	435,393	404,169	259,245	320,512	716,508	698,100	703,691	585,678	428,618	368,648	236,204	0	5,156,766
<b>Stampede (Gross)</b>													
	398	1,075	312	2,045	2,311	949	1,579	501	583	347	274		10,374
<b>Stampede (Net)</b>													
	371	1,046	288	2,016	2,290	939	1,565	486	564	329	250		10,144
<b><u>Energy in mwh</u></b>													
<b>Tracy</b>													
Tot Energy	61295	54825	61731	24949	20517	60303	59314	61633	57853	61126	59192		582,738
Fed Off-Pk	29012	25474	29228	12274	9188	28879	28189	29372	27872	28085	29439		277,012
<b>O'Neill</b>													
Tot Energy	12985	7203	9849	2869	341	2668	501	2840	4537	7786	11799		63,378
Fed Off-Pk	6183	3393	4698	1381	117	1336	256	1420	2293	3582	5894		30,553
<b>San Luis</b>													
Fed Energy	61979	32737	54490	2299	36	124	132	991	14244	23058	49543		239,633
Fed Off-Pk	60284	32707	54415	2224	36	79	102	991	14169	22953	49423		237,383
<b>Dos Amigos</b>													
Fed Energy	6543	12352	10650	12771	12180	15096	32814	22662	8115	7661	7098		147,942
Fed Off-Pk	5295	8316	7635	8190	8475	9771	18384	13482	6105	6131	5808		97,592
<b>Banks - Fed</b>													
Fed Energy	0	0	0	0	0	0	0	0	1664	0	0		1,664
Fed Off-Pk	0	0	0	0	0	0	0	0	104	0	0		104
<b>Total Energy</b>	142,802	107,117	136,720	42,888	33,074	78,191	92,761	88,126	86,413	99,631	127,632	0	1,035,355
<b>Total Fed Off-Pk</b>	100,774	69,890	95,976	24,069	17,816	40,065	46,931	45,265	50,543	60,751	90,564	0	642,644

UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

NOVEMBER 2003

SHASTA LAKE DAILY OPERATIONS

RUN DATE: March 12, 2004

DAY	ELEV	STORAGE		COMPUTED* INFLOW C.F.S.	RELEASE - C.F.S.			EVAPORATION C.F.S.	INCHES	PRECIP INCHES
		1000 ACRE-FEET IN LAKE	CHANGE		POWER	RIVER SPILL	OUTLET			
		3,090.9								
1	1,011.42	3,084.4	-6.5	2,361	5,526	0	0	95	.14	.00
2	1,011.28	3,081.2	-3.2	4,959	6,494	0	0	95	.14	.00
3	1,011.03	3,075.4	-5.8	3,634	6,491	0	0	54	.08	.83
4	1,010.85	3,071.3	-4.1	3,404	5,464	0	0	27	.04	.00
5	1,010.66	3,066.9	-4.4	2,987	5,141	0	0	47	.07	.08
6	1,010.49	3,063.0	-3.9	3,070	4,938	0	0	101	.15	.00
7	1,010.49	3,063.0	+0.0	4,471	4,437	0	0	34	.05	.36
8	1,010.85	3,071.3	+8.3	7,099	2,896	0	0	34	.05	1.55
9	1,011.17	3,078.6	+7.4	8,041	4,324	0	0	0	.00	2.59
10	1,011.31	3,081.9	+3.2	4,835	3,151	0	0	54	.08	.79
11	1,011.41	3,084.2	+2.3	4,252	3,033	0	0	54	.08	.00
12	1,011.46	3,085.3	+1.2	4,056	3,345	0	0	129	.19	.00
13	1,011.45	3,085.1	-0.2	3,626	3,640	0	0	102	.15	.00
14	1,011.60	3,088.6	+3.5	5,188	3,442	0	0	0	.00	.01
15	1,011.96	3,096.9	+8.3	7,089	2,863	0	0	34	.05	1.95
16	1,012.03	3,098.5	+1.6	5,228	4,350	0	0	61	.09	.78
17	1,012.06	3,099.2	+0.7	4,686	4,321	0	0	14	.02	.28
18	1,012.05	3,099.0	-0.2	4,136	4,219	0	0	34	.05	.29
19	1,012.14	3,101.1	+2.1	5,343	4,276	0	0	14	.02	.00
20	1,012.07	3,099.4	-1.6	3,952	4,744	0	0	27	.04	.00
21	1,012.01	3,098.0	-1.4	4,020	4,695	0	0	27	.04	.00
22	1,011.94	3,096.4	-1.6	3,667	4,442	0	0	41	.06	.00
23	1,011.85	3,094.4	-2.1	3,109	4,055	0	0	102	.15	.00
24	1,011.80	3,093.2	-1.2	3,704	4,198	0	0	88	.13	.00
25	1,011.75	3,092.0	-1.2	3,868	4,389	0	0	61	.09	.00
26	1,011.72	3,091.4	-0.7	4,091	4,386	0	0	54	.08	.00
27	1,011.72	3,091.4	+0.0	4,691	4,677	0	0	14	.02	.00
28	1,011.66	3,090.0	-1.4	3,694	4,379	0	0	14	.02	.00
29	1,011.68	3,090.4	+0.5	5,003	4,756	0	0	14	.02	.32
30	1,011.67	3,090.2	-0.2	4,438	4,540	0	0	14	.02	.92
<b>TOTALS</b>			<b>-6</b>	<b>132,702</b>	<b>131,612</b>	<b>0</b>	<b>0</b>	<b>1,439</b>	<b>2.12</b>	<b>10.75</b>
<b>ACRE-FEET</b>			<b>-600</b>	<b>263,214</b>	<b>261,052</b>	<b>0</b>	<b>0</b>	<b>2,854</b>		

COMMENTS:

\* COMPUTED INFLOW IS THE SUM OF CHANGE IN STORAGE, RELEASES AND EVAPORATION.

SUMMARY

	RELEASE (ACRE-FEET)			PRECIPITATION
POWER	261,052	OUTLET	0	THIS MONTH = 10.75
SPILL	0	TOTAL	261,052	JULY 1, 2003 TO DATE = 12.47

UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

NOVEMBER 2003

**TRINITY LAKE DAILY OPERATIONS**

RUN DATE: March 12, 2004

DAY	ELEV	STORAGE		COMPUTED* INFLOW C.F.S.	POWER	RELEASE - C.F.S.		EVAPORATION		PRECIP INCHES (1)
		1000 ACRE-FEET IN LAKE	CHANGE			SPILL	OUTLET	C.F.S.	INCHES (1)	
		1,729.1								
1	2,321.30	1,728.5	-0.5	51	317	0	0	0	.00	.00
2	2,321.25	1,727.9	-0.7	168	431	0	0	70	.18	.00
3	2,321.26	1,728.0	+0.1	408	325	0	0	16	.04	.88
4	2,321.12	1,726.1	-1.8	620	1,536	0	0	16	.04	.00
5	2,320.91	1,723.4	-2.8	104	1,492	0	0	8	.02	.13
6	2,320.74	1,721.1	-2.2	285	1,404	0	0	8	.02	.01
7	2,320.61	1,719.4	-1.7	574	1,432	0	0	4	.01	.23
8	2,320.60	1,719.3	-0.1	1,360	1,422	0	0	4	.01	.28
9	2,320.66	1,720.1	+0.8	1,794	1,396	0	0	0	.00	1.07
10	2,320.58	1,719.0	-1.1	912	1,442	0	0	0	.00	.43
11	2,320.40	1,716.7	-2.4	301	1,475	0	0	19	.05	.01
12	2,320.25	1,714.7	-2.0	472	1,454	0	0	12	.03	.00
13	2,320.06	1,712.2	-2.5	194	1,434	0	0	19	.05	.00
14	2,319.92	1,710.4	-1.8	384	1,306	0	0	4	.01	.00
15	2,319.82	1,709.1	-1.3	691	1,350	0	0	0	.00	.64
16	2,319.82	1,709.1	+0.0	287	275	0	0	12	.03	.13
17	2,319.84	1,709.3	+0.3	422	278	0	0	12	.03	.14
18	2,319.86	1,709.6	+0.3	419	268	0	0	19	.05	.00
19	2,319.87	1,709.7	+0.1	366	296	0	0	4	.01	.00
20	2,319.87	1,709.7	+0.0	312	300	0	0	12	.03	.00
21	2,319.88	1,709.8	+0.1	318	229	0	0	23	.06	.00
22	2,319.82	1,709.1	-0.8	392	788	0	0	0	.00	.00
23	2,319.73	1,707.9	-1.2	426	1,019	0	0	0	.00	.00
24	2,319.62	1,706.4	-1.4	273	960	0	0	38	.10	.00
25	2,319.48	1,704.6	-1.8	428	1,340	0	0	12	.03	.00
26	2,319.31	1,702.4	-2.2	195	1,312	0	0	4	.01	.02
27	2,319.17	1,700.6	-1.8	221	1,129	0	0	15	.04	.00
28	2,319.07	1,699.3	-1.3	370	1,025	0	0	4	.01	.00
29	2,319.08	1,699.4	+0.1	1,017	943	0	0	8	.02	.46
30	2,319.17	1,700.6	+1.2	1,313	712	0	0	8	.02	.96
<b>TOTALS</b>			<b>-28.4</b>	<b>15,077</b>	<b>29,090</b>	<b>0</b>	<b>0</b>	<b>351</b>	<b>.90</b>	<b>5.39</b>
<b>ACRE-FEET</b>			<b>-28,400</b>	<b>29,905</b>	<b>57,700</b>	<b>0</b>	<b>0</b>	<b>696</b>		

COMMENTS:

\* COMPUTED INFLOW IS THE SUM OF CHANGE IN STORAGE, RELEASES AND EVAPORATION.

(1) EVAPORATION AND PRECIPITATION RECORDS TAKEN FROM STATION AT TRINITY RIVER HATCHERY.

**SUMMARY**

RELEASE (ACRE-FEET)		PRECIPITATION	
POWER	57,700	OUTLET	0
SPILL	0	TOTAL	57,700
		THIS MONTH =	5.39
		JULY 1, 2003 TO DATE =	7.08

UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

NOVEMBER 2003

WHISKEYTOWN LAKE DAILY OPERATIONS

RUN DATE: March 12, 2004

DAY	ELEV	STORAGE 1000 ACRE-FEET IN LAKE CHANGE	COMPUTED INFLOW C.F.S. *	FROM JUDGE FRANCIS CARR PP	CLEAR CR. NATURAL FLOW	RELEASE - C.F.S. — TO CLEAR CR — (1) OUTLETS	SPILL	TO SPRING CR. PP	EVAP. C.F.S. INCHES	PRECIP INCHES		
		235.6										
1	1,207.54	233.3	-2.4	70	118	-48	200	0	1,060	6	.07	.00
2	1,207.50	233.1	-0.1	156	118	38	200	0	14	6	.06	.00
3	1,207.38	232.8	-0.4	23	118	-95	200	0	14	0	.00	.79
4	1,207.31	232.5	-0.2	1,245	1,172	73	200	0	1,152	4	.04	.01
5	1,207.16	232.1	-0.5	1,159	1,131	28	200	0	1,197	0	.00	.00
6	1,206.88	231.2	-0.9	1,215	1,188	27	200	0	1,459	0	.00	.00
7	1,206.67	230.5	-0.7	1,288	1,169	119	200	0	1,419	0	.00	.37
8	1,206.13	228.8	-1.7	1,968	1,255	713	200	0	2,621	0	.00	1.76
9	1,206.33	229.5	+0.6	1,672	1,165	507	200	0	1,156	0	.00	1.80
10	1,205.36	226.4	-3.0	1,404	1,160	244	200	0	2,728	0	.00	.63
11	1,204.37	223.4	-3.1	1,291	1,165	126	200	0	2,632	3	.03	.00
12	1,203.66	221.2	-2.2	1,355	1,228	127	200	0	2,255	0	.00	.00
13	1,202.96	219.1	-2.1	1,153	1,074	79	200	0	2,029	5	.06	.00
14	1,202.24	216.9	-2.2	1,353	1,085	268	200	0	2,256	0	.00	.06
15	1,201.55	214.8	-2.1	1,359	1,143	216	200	0	2,211	0	.00	.20
16	1,200.77	212.4	-2.3	173	122	51	200	0	1,157	0	.00	2.29
17	1,200.22	210.8	-1.6	103	118	-15	200	0	733	0	.00	.00
18	1,199.81	209.6	-1.2	17	118	-101	200	0	431	3	.03	.00
19	1,199.23	207.8	-1.7	58	118	-60	200	0	727	0	.00	.00
20	1,198.80	206.6	-1.3	31	118	-87	200	0	472	0	.00	.00
21	1,198.36	205.3	-1.3	57	117	-60	200	0	506	4	.05	.00
22	1,198.18	204.7	-0.5	525	513	12	200	0	593	0	.00	.00
23	1,198.07	204.4	-0.3	629	642	-13	200	0	592	0	.00	.00
24	1,198.17	204.7	+0.3	962	962	0	200	0	609	4	.05	.00
25	1,198.33	205.2	+0.5	954	962	-8	200	0	515	2	.02	.00
26	1,198.47	205.6	+0.4	970	988	-18	200	0	562	0	.00	.00
27	1,198.55	205.8	+0.2	855	885	-30	200	0	537	0	.00	.00
28	1,198.61	206.0	+0.2	803	842	-39	200	0	514	0	.00	.00
29	1,198.75	206.4	+0.4	940	783	157	200	0	532	0	.00	.15
30	1,198.79	206.5	+0.1	789	624	165	200	0	530	0	.00	.28
<b>TOTALS</b>			<b>-29.1</b>	<b>24,577</b>	<b>22,201</b>	<b>2,376</b>	<b>6,000</b>	<b>0</b>	<b>33,213</b>	<b>37</b>	<b>.41</b>	<b>8.34</b>
<b>ACRE-FEET</b>			<b>-29.1</b>	<b>48,748</b>	<b>44,036</b>	<b>4,713</b>	<b>11,901</b>	<b>0</b>	<b>65,878</b>	<b>73</b>		

\* COMPUTED INFLOW IS THE SUM OF CHANGE IN STORAGE, RELEASES AND EVAPORATION.

(1) WATER TO CLEAR CREEK BEING DISCHARGED THROUGH 972.00-1110.00 ELEVATION OUTLET.

SUMMARY

	RELEASE (ACRE-FEET)			PRECIPITATION	
POWER	65,878	OUTLET	11,901	THIS MONTH	8.34
SPILL	0	TOTAL	77,779	JULY 1, 2003 TO DATE	9.43



UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

Table 6

NOVEMBER 2003

LEWISTON LAKE DAILY OPERATIONS

RUN DATE: December 19, 2003

DAY	ELEV	STORAGE ACRE-FEET		COMPUTED* INFLOW C.F.S.	RELEASE - C.F.S.			JUDGE FRANCIS CARR POWERPLANT	EVAPORATION (2)	
		IN LAKE	CHANGE		POWER	RIVER OUTLETS (1)	SPILL		C.F.S.	INCHES
		13,918								
1	1,900.84	13,793	-125	355	80	90	130	118	0	.00
2	1,901.12	14,001	+208	527	80	90	130	118	4	.18
3	1,901.00	13,911	-90	374	80	90	130	118	1	.04
4	1,901.36	14,180	+269	1,609	80	90	130	1,172	1	.04
5	1,901.61	14,367	+187	1,525	80	90	130	1,131	0	.02
6	1,901.57	14,337	-30	1,473	80	90	130	1,188	0	.02
7	1,901.54	14,315	-22	1,458	80	90	130	1,169	0	.01
8	1,901.41	14,218	-97	1,506	80	90	130	1,255	0	.01
9	1,901.32	14,150	-68	1,431	80	90	130	1,165	0	.00
10	1,901.38	14,195	+45	1,483	80	90	130	1,160	0	.00
11	1,901.47	14,263	+68	1,500	80	90	130	1,165	1	.05
12	1,901.48	14,270	+7	1,533	80	90	130	1,228	1	.03
13	1,901.58	14,345	+75	1,413	80	90	130	1,074	1	.05
14	1,901.54	14,315	-30	1,370	80	90	130	1,085	0	.01
15	1,901.39	14,203	-112	1,387	78	92	130	1,143	0	.00
16	1,901.37	14,188	-15	415	80	90	130	122	1	.03
17	1,901.45	14,248	+60	449	80	90	130	118	1	.03
18	1,901.49	14,278	+30	434	80	90	130	118	1	.05
19	1,901.51	14,292	+14	425	80	90	130	118	0	.01
20	1,901.53	14,307	+15	427	80	90	130	118	1	.03
21	1,901.26	14,105	-202	316	80	90	130	117	1	.06
22	1,901.20	14,061	-44	791	80	90	130	513	0	.00
23	1,901.38	14,195	+134	1,010	80	90	130	642	0	.00
24	1,900.76	13,734	-461	1,032	80	90	130	962	2	.10
25	1,901.00	13,911	+177	1,352	80	90	130	962	1	.03
26	1,901.36	14,180	+269	1,424	80	90	130	988	0	.01
27	1,901.39	14,203	+23	1,198	80	90	130	885	1	.04
28	1,901.38	14,195	-8	1,138	80	90	130	842	0	.01
29	1,901.39	14,203	+8	1,087	80	90	130	783	0	.02
30	1,901.17	14,038	-165	841	80	90	130	624	0	.02
<b>TOTALS</b>			<b>+120</b>	<b>31,283</b>	<b>2,398</b>	<b>2,702</b>	<b>3,900</b>	<b>22,201</b>	<b>18</b>	<b>.90</b>
<b>ACRE-FEET</b>			<b>+120</b>	<b>62,050</b>	<b>4,756</b>	<b>5,359</b>	<b>7,736</b>	<b>44,036</b>	<b>36</b>	

\* COMPUTED INFLOW IS THE SUM OF CHANGE IN STORAGE, RELEASES AND EVAPORATION.

(1) OUTLET RELEASE INCLUDES THE CONTINUOUS FISH RELEASE OF 75 C.F.S.

(2) INCHES OF EVAPORATION TAKEN FROM PAN AT TRINITY RIVER HATCHERY

SUMMARY			
RELEASE (ACRE-FEET)			
TOTAL POWER	4,756	JUDGE FRANCIS CARR POWERPLANT	44,036
TOTAL RIVER	17,851	TOTAL RELEASE	61,887

UNITED STATES DEPARTMENT OF THE INTERIOR  
 U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

**Table 7**

**NOVEMBER 2003**

**SPRING CREEK DEBRIS RESERVOIR DAILY OPERATIONS**

RUN DATE: December 19, 2003

DAY	ELEV	STORAGE		COMPUTED* INFLOW C.F.S.	RELEASE - C.F.S.		— SPRING CR DEBRIS DAM —		**KES COPPER MG/L
		ACRE-FEET IN LAKE	CHANGE		SPILL	OUTLET	TIME	COPPER ZINC	
		886							
1	710.95	890	+4	2	0	0			
2	711.17	896	+6	3	0	0			
3	711.40	903	+7	4	0	0			
4	711.54	907	+4	2	0	0			
5	711.71	912	+5	3	0	0			
6	711.87	917	+5	3	0	0			
7	712.19	927	+10	5	0	0			
8	714.64	1,003	+76	38	0	0			
9	717.11	1,085	+82	41	0	0			
10	717.64	1,103	+18	9	0	0			
11	717.92	1,112	+9	5	0	0			
12	718.13	1,120	+8	4	0	0			
13	718.32	1,126	+6	3	0	0			
14	719.50	1,168	+42	21	0	0			
15	720.44	1,202	+34	17	0	0			
16	721.63	1,245	+43	22	0	0			
17	722.26	1,269	+24	12	0	0			
18	722.62	1,282	+13	7	0	0			
19	722.91	1,293	+11	6	0	0			
20	723.15	1,302	+9	5	0	0			
21	723.25	1,306	+4	4	0	2			
22	723.10	1,300	-6	2	0	5			
23	722.97	1,295	-5	2	0	5			
24	722.80	1,289	-6	2	0	5			
25	722.62	1,282	-7	1	0	5			
26	722.18	1,266	-16	-8	0	0			
27	721.51	1,241	-25	2	0	15			
28	720.83	1,216	-25	-13	0	0			
29	720.47	1,203	-13	8	0	15			
30	720.17	1,192	-11	-6	0	0			
<b>TOTALS</b>			<b>+306</b>	<b>206</b>	<b>0</b>	<b>52</b>			
<b>ACRE-FEET</b>			<b>+306</b>	<b>409</b>	<b>0</b>	<b>103</b>			

COMMENTS:

\* COMPUTED INFLOW IS THE SUM OF CHANGE IN STORAGE, RELEASES AND EVAPORATION.

**SUMMARY**

RELEASE (ACRE-FEET)

SPILL	0
OUTLET	103
TOTAL	103

UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

**Table 8**

**NOVEMBER 2003**

**KESWICK RESERVOIR DAILY OPERATIONS**

RUN DATE: December 19, 2003

DAY	ELEV	STORAGE ACRE-FEET RES.	CHANGE	COMPUTED* INFLOW C.F.S.	SPRING CR. P. P. RELEASE	SHASTA RELEASE C.F.S	POWER	RELEASE - C.F.S. SPILL	FISHTRAP	EVAP C.F.S. (1)
		22,174								
1	584.05	21,921	-253	6,891	1,060	5,526	7,016	0	0	3
2	583.58	21,635	-286	6,867	14	6,494	7,008	0	0	3
3	584.01	21,896	+261	6,972	14	6,491	6,839	0	0	1
4	584.13	21,970	+74	7,026	1,152	5,464	6,988	0	0	1
5	583.72	21,720	-250	6,713	1,197	5,141	6,838	0	0	1
6	584.81	22,390	+670	6,801	1,459	4,938	6,460	0	0	3
7	585.12	22,582	+192	6,162	1,419	4,437	6,064	0	0	1
8	584.43	22,155	-427	5,912	2,621	2,896	6,126	0	0	1
9	584.08	21,939	-216	5,912	1,156	4,324	6,021	0	0	0
10	584.09	21,946	+7	5,995	2,728	3,151	5,984	6	0	1
11	583.89	21,823	-123	5,763	2,632	3,033	5,824	0	0	1
12	583.34	21,489	-334	5,453	2,255	3,345	5,618	0	0	3
13	583.62	21,659	+170	5,713	2,029	3,640	5,624	0	0	3
14	583.84	21,793	+134	5,682	2,256	3,442	5,614	0	0	0
15	583.99	21,884	+91	5,471	2,211	2,863	5,424	0	0	1
16	584.28	22,063	+179	5,493	1,157	4,350	5,401	0	0	2
17	583.42	21,538	-525	5,071	733	4,321	5,336	0	0	0
18	582.07	20,728	-810	4,805	431	4,219	5,212	0	0	1
19	582.15	20,776	+48	5,050	727	4,276	5,026	0	0	0
20	583.17	21,386	+610	5,312	472	4,744	5,003	0	0	1
21	583.58	21,635	+249	5,135	506	4,695	5,008	0	0	1
22	583.84	21,793	+158	5,083	593	4,442	5,002	0	0	1
23	583.09	21,338	-455	4,779	592	4,055	5,005	0	0	3
24	582.70	21,104	-234	4,899	609	4,198	5,015	0	0	2
25	582.54	21,008	-96	4,993	515	4,389	5,039	0	0	2
26	582.41	20,931	-77	4,981	562	4,386	5,019	0	0	1
27	583.12	21,356	+425	5,229	537	4,677	5,015	0	0	0
28	582.95	21,253	-103	4,952	514	4,379	5,004	0	0	0
29	584.00	21,890	+637	5,324	532	4,756	5,003	0	0	0
30	584.39	22,131	+241	5,134	530	4,540	5,012	0	0	0
<b>TOTALS</b>			<b>-43</b>	<b>169,573</b>	<b>33,213</b>	<b>131,612</b>	<b>169,548</b>	<b>6</b>	<b>0</b>	<b>37</b>
<b>ACRE-FEET</b>			<b>-43</b>	<b>336,348</b>	<b>65,878</b>	<b>261,052</b>	<b>336,298</b>	<b>12</b>	<b>0</b>	<b>73</b>

\*COMPUTED INFLOW IS SUM OF CHANGE IN STORAGE, RELEASES, AND EVAPORATION.  
(1) EVAPORATION RECORDS TAKEN FROM SHASTA PAN.

**SUMMARY**  
RELEASE (ACRE-FEET)

POWER	336,298
SPILL	12
FISH TRAP	0

NOVEMBER 2003

RED BLUFF DIVERSION RESERVOIR DAILY OPERATIONS

RUN DATE: December 19, 2003

DAY	ELEVATION	STORAGE		RELEASE C.F.S		RELEASE TO SACTO RIVER
		IN LAKE	ACRE-FEET CHANGE	CORNING CANAL	TEHAMA COLUSA CANAL	
		348				
1	238.96	346	-2	5	195	7,145
2	238.95	345	-1	16	70	7,002
3	238.10	258	-87	0	0	7,414
4	238.98	348	+90	15	0	7,362
5	238.97	347	-1	0	54	7,289
6	238.97	347	+0	0	46	7,344
7	238.87	337	-10	0	0	6,289
8	238.81	331	-6	0	0	6,108
9	238.98	348	+17	10	0	7,216
10	238.09	257	-91	0	0	7,584
11	238.88	338	+81	10	0	7,740
12	239.07	358	+20	0	0	7,180
13	238.82	332	-26	0	0	7,016
14	238.82	332	+0	0	0	6,950
15	238.81	331	-1	0	0	7,030
16	238.87	337	+6	0	0	7,270
17	238.85	335	-2	0	0	7,140
18	238.81	331	-4	0	0	6,950
19	238.69	318	-13	55	0	6,640
20	238.59	308	-10	0	0	6,430
21	238.58	307	-1	0	0	6,370
22	238.27	276	-31	0	0	6,330
23	238.56	305	+29	0	0	6,300
24	238.57	306	+1	0	0	6,300
25	238.56	305	-1	0	0	6,330
26	238.53	302	-3	0	0	6,280
27	238.55	304	+2	0	0	6,280
28	238.53	302	-2	0	0	6,280
29	238.53	302	+0	0	0	6,300
30	238.62	311	+9	0	0	6,430
<b>TOTALS</b>			<b>-37</b>	<b>111</b>	<b>365</b>	<b>204,299</b>
<b>ACRE-FEET</b>			<b>-37</b>	<b>220</b>	<b>724</b>	<b>405,227</b>

**SUMMARY**

RELEASE (ACRE-FEET)

CORNING CANAL	220
TEHAMA-COLUSA CANAL	724
TO SACTO RIVER	405,227
<b>TOTAL</b>	<b>406,171</b>

Table 10

CORPS OF ENGINEERS, U.S. ARMY  
Sacramento District Sacramento, California

DAILY OPERATION OF BLACK BUTTE RESERVOIR, STONY CREEK, CALIFORNIA

November 2003

Date	Midnight Elev (ft)	Storage (ac-ft)	Storage Change (ac-ft)	Mean Inflow (sfd)	----- Mean Outflow -----				Gross Evap (ac-ft)	Pan Evap (in)	Prec (in)	Total U S Storage (ac-ft)	Top Con Storage (ac-ft)
					Total (sfd)	River (sfd)	[1] (sfd)	[2] (sfd)					
1	439.87	31468	-36	35	46	27	19	0	15	0.1	0	74410	45200
2	439.86	31450	-18	28	32.5	32	0.5	0	9	0.06	0.02	74368	43800
3	439.86	31450	0	36	31.4	31	0.4	0	9	0.06	0	74345	42300
4	439.85	31431	-19	29	31.1	31	0.1	0	15	0.1	0.02	74355	40800
5	439.85	31431	0	35	30	30	0	0	10	0.07	0	74329	39300
6	439.85	31431	0	30	30	30	0	0	0	0	0.12	74329	37800
7	439.86	31450	19	42	30	30	0	0	4	0.03	0.27	74439	36200
8	439.97	31651	201	132	31	31	0	0	0	0	1.26	74683	34300
9	440.07	31835	184	127	31	31	0	0	6	0.04	0.56	74958	32500
10	440.11	31908	73	75	31	31	0	0	15	0.1	0	75226	31300
11	440.13	31945	37	54	28	28	0	0	15	0.1	0	75288	31200
12	440.14	31964	19	51	33	33	0	0	16	0.11	0	75330	31200
13	440.16	32001	37	51	29	29	0	0	6	0.04	0	75361	31200
14	440.19	32056	55	58	30	30	0	0	0	0	0.14	75387	31100
15	440.2	32074	18	42	30	30	0	0	6	0.04	0.03	75459	31100
16	440.23	32130	56	60	30	30	0	0	3	0.02	0	75542	31000
17	440.26	32186	56	62	30	30	0	0	7	0.05	0	75645	30900
18	440.3	32260	74	71	29	29	0	0	9	0.06	0	75645	30900
19	440.32	32297	37	50	29	29	0	0	4	0.03	0	75707	30800
20	440.34	32334	37	53	28	28	0	0	13	0.09	0	75723	30800
21	440.35	32353	19	46	29	29	0	0	15	0.1	0	75769	30700
22	440.34	32334	-19	33	29	29	0	0	27	0.18	0	75758	30800
23	440.36	32371	37	52	30	30	0	0	6	0.04	0	75768	30700
24	440.37	32390	19	43	30	30	0	0	7	0.05	0	75799	30700
25	440.38	32408	18	44	30	30	0	0	9	0.06	0	75799	30700
26	440.38	32408	0	37	30	30	0	0	13	0.09	0	75703	30700
27	440.39	32427	19	43	30	30	0	0	7	0.05	0	75723	30700
28	440.4	32446	19	42	30	30	0	0	4	0.03	0.21	75772	30600
29	440.48	32595	149	106	31	31	0	0	0	0	0.55	76014	30400
30	440.61	32838	243	156	30	30	0	0	6	0.04	0.3	76603	-NR-
Totals	(sfd)			1723	919	899	20	0					
Totals	(ac-ft)		1334	3418	1822.8	1783.2			256				
Totals	(inches)									1.74	3.48		

[1] South Diversion Canal, [2] Wakerman Ranch Diversion above South Diversion Canal Measuring Weir

\*\*\* Preliminary - Data Subject to Revision \*\*\*

UNITED STATES DEPARTMENT OF THE INTERIOR  
 U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

Table 11

NOVEMBER 2003

FOLSOM LAKE DAILY OPERATIONS

RUN DATE: December 19, 2003

DAY	ELEV	STORAGE		COMPUTED* INFLOW C.F.S.	POWER	RELEASE - C.F.S.		PUMPING PLANT	EVAPORATION		PRECIP INCHES
		1000 ACRE-FEET IN LAKE	CHANGE			RIVER SPILL	OUTLET		C.F.S.	INCHES	
		561.9									
1	423.65	558.4	-3.5	917	2,498	0	0	155	14	.05	.34
2	423.25	555.0	-3.4	1,206	2,733	0	0	151	28	.10	.00
3	423.15	554.2	-0.8	1,840	2,100	0	0	149	17	.06	.58
4	422.99	552.8	-1.4	1,571	2,102	0	0	131	20	.07	.01
5	422.69	550.3	-2.5	934	2,077	0	0	110	14	.05	.00
6	422.48	548.5	-1.8	1,456	2,212	0	0	108	23	.08	.00
7	422.34	547.4	-1.2	1,793	2,249	0	0	121	14	.05	.23
8	422.18	546.0	-1.3	1,466	2,018	0	0	107	17	.06	.01
9	421.90	543.7	-2.3	1,023	2,075	0	0	102	25	.09	.63
10	421.66	541.7	-2.0	1,259	2,142	0	0	100	22	.08	.00
11	421.40	539.5	-2.2	1,224	2,192	0	0	98	22	.08	.00
12	421.09	537.0	-2.6	1,086	2,263	0	0	96	25	.09	.00
13	420.87	535.1	-1.8	1,420	2,203	0	0	108	25	.09	.00
14	420.77	534.3	-0.8	1,864	2,162	0	0	100	17	.06	.00
15	420.59	532.8	-1.5	1,515	2,160	0	0	91	11	.04	.15
16	420.28	530.3	-2.6	1,001	2,189	0	0	93	6	.02	.33
17	419.99	527.9	-2.4	1,041	2,131	0	0	105	8	.03	.00
18	419.71	525.6	-2.3	1,200	2,232	0	0	101	17	.06	.01
19	419.48	523.7	-1.9	1,372	2,213	0	0	97	8	.03	.00
20	419.23	521.7	-2.0	1,268	2,197	0	0	90	8	.03	.00
21	418.99	519.8	-2.0	1,283	2,158	0	0	100	11	.04	.00
22	418.79	518.1	-1.6	1,442	2,124	0	0	108	25	.09	.00
23	418.49	515.7	-2.4	1,054	2,145	0	0	104	27	.10	.00
24	418.24	513.7	-2.0	1,380	2,270	0	0	109	19	.07	.00
25	418.05	512.2	-1.5	1,587	2,244	0	0	109	8	.03	.00
26	417.77	509.9	-2.2	1,186	2,199	0	0	100	19	.07	.00
27	417.48	507.6	-2.3	1,107	2,159	0	0	102	16	.06	.00
28	417.18	505.2	-2.4	988	2,095	0	0	95	8	.03	.00
29	416.79	502.1	-3.1	678	2,155	0	0	86	3	.01	.00
30	416.40	499.0	-3.1	836	2,309	0	0	83	3	.01	.00
<b>TOTALS</b>			<b>-62.9</b>	<b>37,997</b>	<b>66,006</b>	<b>0</b>	<b>0</b>	<b>3,209</b>	<b>480</b>	<b>1.73</b>	<b>2.29</b>
<b>ACRE-FEET</b>			<b>-62,900</b>	<b>75,367</b>	<b>130,923</b>	<b>0</b>	<b>0</b>	<b>6,365</b>	<b>952</b>		

COMMENTS:

\* COMPUTED INFLOW IS THE SUM OF CHANGE IN STORAGE, RELEASES, PUMPING AND EVAPORATION.

SUMMARY

	RELEASE (ACRE-FEET)			PRECIPITATION	
POWER	130,923	OUTLET	0	THIS MONTH =	2.29
SPILL	0	TOTAL	137,288	JULY 1, 2003 TO DATE =	2.61
PUMPING PLANT	6,365				

UNITED STATES DEPARTMENT OF THE INTERIOR  
 U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

Table 12

NOVEMBER 2003

LAKE NATOMA DAILY OPERATIONS

RUN DATE: December 19, 2003

DAY	ELEV	STORAGE		COMPUTED* INFLOW C.F.S.	FOLSOM SOUTH CANAL	RELEASE - C.F.S.			EVAP C.F.S. (1)
		ACRE-FEET IN LAKE	CHANGE			POWER	SPILL	HATCHERY	
1	123.72	8,326							
2	123.72	8,129	-197	2,439	45	2,432	0	60	1
3	124.09	8,306	+177	2,618	45	2,423	0	60	1
4	124.16	8,341	+35	2,086	45	1,962	0	60	1
5	123.91	8,219	-122	1,990	45	1,940	6	60	1
6	123.69	8,115	-104	1,993	45	1,939	0	60	1
7	123.72	8,129	+14	2,059	45	1,946	0	60	1
8	123.98	8,252	+123	2,112	45	1,944	0	60	1
9	123.59	8,068	-184	1,952	45	1,939	0	60	1
10	123.55	8,050	-18	2,043	45	1,946	0	60	1
11	123.43	7,993	-57	2,023	45	1,946	0	60	1
12	123.51	8,031	+38	2,064	45	1,939	0	60	1
13	123.78	8,158	+127	2,118	45	1,948	0	60	1
14	123.83	8,181	+23	2,055	45	1,937	0	60	1
15	123.76	8,148	-33	2,030	45	1,941	0	60	1
16	123.82	8,176	+28	2,067	45	1,947	0	60	1
17	123.88	8,205	+29	2,059	45	1,939	0	60	0
18	123.79	8,162	-43	2,018	45	1,935	0	60	0
19	123.89	8,209	+47	2,072	45	1,942	0	60	1
20	123.98	8,252	+43	2,061	45	1,934	0	60	0
21	124.02	8,271	+19	2,056	45	1,941	0	60	0
22	123.90	8,214	-57	2,015	45	1,938	0	60	1
23	123.69	8,115	-99	1,995	45	1,939	0	60	1
24	123.58	8,064	-51	2,022	45	1,942	0	60	1
25	123.84	8,186	+122	2,107	45	1,939	0	60	1
26	124.00	8,261	+75	2,087	45	1,944	0	60	0
27	123.92	8,223	-38	2,033	45	1,946	0	60	1
28	123.85	8,191	-32	2,039	45	1,949	0	60	1
29	123.47	8,012	-179	1,952	45	1,937	0	60	0
30	123.47	8,012	+0	2,041	45	1,936	0	60	0
123.86	8,195	+183	2,141	45	1,944	0	60	0	
<b>TOTALS</b>			<b>-131</b>	<b>62,347</b>	<b>1,350</b>	<b>59,234</b>	<b>6</b>	<b>1,800</b>	<b>22</b>
<b>ACRE-FEET</b>			<b>-131</b>	<b>123,665</b>	<b>2,678</b>	<b>117,491</b>	<b>12</b>	<b>3,570</b>	<b>44</b>

COMMENTS:

\* COMPUTED INFLOW IS THE SUM OF CHANGE IN STORAGE, RELEASES AND EVAPORATION.

(1) INCHES OF EVAPORATION TAKEN FROM FOLSOM PAN.

SUMMARY

	RELEASES (ACRE-FEET)			RELEASES (ACRE-FEET)	
POWER	117,491	FOLSOM SOUTH CANAL	2,678	TOTAL	123,751
SPILL	12	HATCHERY	3,570		

UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

NOVEMBER 2003

**NEW MELONES LAKE DAILY OPERATIONS**

RUN DATE: March 12, 2004

DAY	ELEV	STORAGE		COMPUTED* INFLOW C.F.S.	POWER	RELEASE - C.F.S.			EVAPORATION		PRECIP INCHES
		1000 ACRE-FEET IN LAKE	CHANGE			SPILL	OUTLET	C.F.S.	INCHES		
		1,266.0									
1	976.70	1,266.7	+0.8	401	0	0	0	22	.08	.27	
2	976.78	1,267.4	+0.7	378	0	0	0	41	.15	.00	
3	976.93	1,268.7	+1.3	648	0	0	0	16	.06	.28	
4	976.96	1,268.9	+0.3	422	0	0	287	8	.03	.10	
5	976.87	1,268.2	-0.8	623	0	0	962	41	.15	.02	
6	976.77	1,267.3	-0.8	565	0	0	962	24	.09	.00	
7	976.80	1,267.6	+0.3	667	0	0	524	16	.06	.22	
8	976.93	1,268.7	+1.1	578	0	0	0	30	.11	.00	
9	977.08	1,269.9	+1.3	653	0	0	0	19	.07	.75	
10	977.14	1,270.4	+0.5	790	0	0	520	16	.06	.05	
11	977.24	1,271.3	+0.8	453	0	0	0	30	.11	.00	
12	977.25	1,271.3	+0.1	411	0	0	342	27	.10	.00	
13	977.36	1,272.3	+0.9	482	0	0	0	16	.06	.00	
14	977.20	1,270.9	-1.3	184	838	0	0	24	.09	.00	
15	977.16	1,270.6	-0.3	872	1,011	0	0	30	.11	.34	
16	977.25	1,271.3	+0.8	389	0	0	0	8	.03	.11	
17	977.35	1,272.2	+0.8	434	0	0	0	11	.04	.02	
18	977.45	1,273.0	+0.8	437	0	0	0	14	.05	.02	
19	977.32	1,271.9	-1.1	392	923	0	0	19	.07	.01	
20	977.31	1,271.9	-0.1	460	472	0	0	30	.11	.00	
21	977.39	1,272.5	+0.7	361	9	0	0	14	.05	.00	
22	977.39	1,272.5	+0.0	376	335	0	0	41	.15	.00	
23	977.48	1,273.3	+0.8	395	0	0	0	14	.05	.00	
24	977.49	1,273.4	+0.1	431	367	0	0	22	.08	.00	
25	977.57	1,274.0	+0.7	372	0	0	0	33	.12	.00	
26	977.65	1,274.7	+0.7	360	0	0	0	22	.08	.00	
27	977.73	1,275.4	+0.7	355	0	0	0	16	.06	.00	
28	977.59	1,274.2	-1.2	396	969	0	0	19	.07	.00	
29	977.67	1,274.9	+0.7	376	0	0	0	38	.14	.00	
30	977.77	1,275.7	+0.8	445	0	0	0	22	.08	.00	
<b>TOTALS</b>			<b>+10.1</b>	<b>14,106</b>	<b>4,924</b>	<b>0</b>	<b>3,597</b>	<b>683</b>	<b>2.51</b>	<b>2.19</b>	
<b>ACRE-FEET</b>			<b>+10,100</b>	<b>27,979</b>	<b>9,767</b>	<b>0</b>	<b>7,135</b>	<b>1,355</b>			

COMMENTS:

\* COMPUTED INFLOW IS THE SUM OF CHANGE IN STORAGE, RELEASES AND EVAPORATION.

**SUMMARY**

	RELEASE (ACRE-FEET)			PRECIPITATION	
POWER	9,767	OUTLET	7,135	THIS MONTH =	2.19
SPILL	0	TOTAL	16,902	JULY 1, 2003 TO DATE =	2.82



OAKDALE IRRIGATION DISTRICT  
 SOUTH SAN JOAQUIN IRRIGATION DISTRICT  
 TRI DAMS PROJECT-CALIFORNIA

NOVEMBER 2003

GOODWIN RESERVOIR DAILY OPERATIONS

RUN DATE: September 14, 2004

DAY	ELEV	STORAGE		TULLOCH	RIVER		RELEASE - C.F.S.	
		ACRE-FEET RES.	CHANGE		RELEASE	OUTLET	SPILL	JOINT MAIN
		539						
1	360.03	539	+0	319	0	250	6	0
2	360.03	539	+0	323	0	255	6	0
3	360.03	539	+0	320	0	253	6	0
4	360.05	541	+2	328	0	255	7	0
5	360.05	541	+0	336	0	258	7	0
6	360.08	543	+2	337	0	259	6	0
7	360.08	543	+0	332	0	256	6	0
8	360.08	543	+0	330	0	257	6	0
9	360.05	541	-2	318	0	262	6	0
10	360.05	541	+0	315	0	264	6	0
11	360.05	541	+0	311	0	260	6	0
12	360.05	541	+0	313	0	264	6	0
13	360.05	541	+0	313	0	267	5	0
14	360.03	539	-2	293	0	261	5	0
15	360.03	539	+0	298	0	247	5	0
16	360.03	539	+0	298	0	248	5	0
17	360.03	539	+0	298	0	249	5	0
18	360.03	539	+0	298	0	249	5	0
19	360.03	539	+0	297	0	247	5	0
20	360.05	541	+2	299	0	249	5	0
21	360.05	541	+0	304	0	246	13	0
22	360.03	539	-2	315	0	250	25	0
23	360.03	539	+0	315	0	248	25	0
24	360.05	541	+2	307	0	250	22	0
25	360.03	539	-2	283	0	247	5	0
26	360.00	537	-2	285	0	249	5	0
27	360.03	539	+2	283	0	247	5	0
28	360.03	539	+0	284	0	248	5	0
29	360.05	541	+2	279	0	242	5	0
30	360.03	539	-2	279	0	244	5	0
<b>TOTALS</b>			<b>+0</b>	<b>9,210</b>	<b>0</b>	<b>7,581</b>	<b>229</b>	<b>0</b>
<b>ACRE-FEET</b>			<b>+0</b>	<b>18,268</b>	<b>0</b>	<b>15,037</b>	<b>454</b>	<b>0</b>

JOINT MAIN OPERATED BY SSJID AND OID.  
 SOUTH MAIN OPERATED BY OID.

**SUMMARY**  
 RELEASE (ACRE-FEET)

JOINT MAIN CANAL	454	OUTLET	0
SOUTH MAIN CANAL	0	SPILL	15,037
		TOTAL	15,491

UNITED STATES DEPARTMENT OF THE INTERIOR  
U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

NOVEMBER 2003

**MILLERTON LAKE DAILY OPERATIONS**

RUN DATE: March 12, 2004

DAY	ELEV	STORAGE		COMPUTED* INFLOW C.F.S.	RELEASE - C.F.S.				EVAPORATION C.F.S.	PRECIP INCHES	
		1000 ACRE-FEET IN LAKE	CHANGE		CANALS		RIVER				
					MADERA	FRIANT-KERN	SPILL	OUTLET			
		211.0									
1	498.71	211.9	+0.8	1,118	0	513	0	161	19	.20	
2	498.92	212.5	+0.6	934	0	453	0	161	12	.13	
3	499.22	213.4	+0.9	1,009	0	411	0	149	7	.07	
4	499.54	214.3	+0.9	960	0	352	0	130	5	.05	
5	499.69	214.7	+0.4	717	0	353	0	130	13	.14	
6	499.85	215.2	+0.5	636	0	265	0	130	5	.05	
7	499.74	214.9	-0.3	202	0	201	0	130	34	.36	
8	500.15	216.1	+1.2	951	0	202	0	131	10	.10	
9	500.35	216.7	+0.6	640	0	202	0	131	10	.11	
10	500.37	216.7	+0.1	431	0	254	0	131	16	.17	
11	500.27	216.4	-0.3	295	0	290	0	131	23	.24	
12	500.24	216.4	-0.1	332	0	238	0	131	8	.08	
13	500.25	216.4	+0.0	356	0	200	0	131	10	.10	
14	500.24	216.4	+0.0	325	0	200	0	131	9	.09	
15	500.24	216.4	+0.0	344	0	200	0	131	13	.14	
16	500.22	216.3	-0.1	306	0	200	0	131	5	.05	
17	500.20	216.2	-0.1	304	0	200	0	131	3	.03	
18	500.18	216.2	-0.1	303	0	200	0	131	2	.02	
19	500.16	216.1	-0.1	309	0	200	0	131	8	.08	
20	500.19	216.2	+0.1	379	0	200	0	131	3	.03	
21	500.16	216.1	-0.1	304	0	200	0	133	16	.17	
22	500.22	216.3	+0.2	434	0	200	0	134	11	.12	
23	500.20	216.2	-0.1	312	0	200	0	134	8	.08	
24	500.17	216.1	-0.1	300	0	200	0	134	10	.10	
25	500.15	216.1	-0.1	305	0	200	0	134	1	.01	
26	500.14	216.1	+0.0	322	0	200	0	134	3	.03	
27	500.29	216.5	+0.4	562	0	200	0	134	5	.05	
28	500.45	217.0	+0.5	583	0	201	0	134	10	.10	
29	500.65	217.6	+0.6	642	0	201	0	134	10	.10	
30	500.94	218.4	+0.9	776	0	202	0	134	8	.08	
<b>TOTALS</b>			<b>+7.4</b>	<b>15,391</b>	<b>0</b>	<b>7,338</b>	<b>0</b>	<b>4,033</b>	<b>297</b>	<b>3.08</b>	<b>1.12</b>
<b>ACRE-FEET</b>			<b>+7,387</b>	<b>30,528</b>	<b>0</b>	<b>14,555</b>	<b>0</b>	<b>7,999</b>	<b>589</b>		

COMMENTS:

\* COMPUTED INFLOW IS THE SUM OF CHANGE IN STORAGE, RELEASES, PUMPING AND EVAPORATION.

SUMMARY			
RELEASE (ACRE-FEET)		PRECIPITATION	
CANALS	RIVER	THIS MONTH =	
FRIANT-KERN	AT FRIANT	14,555	1.12
MADERA	TOTAL RELEASES	0	1.25
		22,554	
		JULY 1, 2003 TO DATE =	

Table 16

**U.S. Bureau of Reclamation - Central Valley Operations Office**  
Delta Outflow Computation (values in c.f.s.)

**November 2003**

Estimated numbers are in bold italic print

Date	DELTA INFLOW								NDCU	DELTA EXPORTS						OUTFLOW INDEX			Export/Inflow			
	Sacto R @Freeport -prev day-	SRTP -prev wk-	Yolo + Misc -prev day-	East Side Streams -prev day-	S. Joaquin River@Vernalis -prev day-	7-day Average	Monthly Average	Total Delta Inflow		Clifton Court (CLT)	Tracy (TRA)	Contra Costa (CCC)	Byron Bethany (BBID)	NBA	Total Delta Exports	3-day Avg TRA & CLT	NDOI daily	7-day Avg	Monthly Avg	Daily (%)	3 Day (%)	14 Day (%)
1-Nov-03	11,279	235	0	180	2,207	2,395	2,038	13,901	1,700	293	3,408	72	0	0	3,773	3,548	8,428	5,993	8,428	26.6%	26.5%	26.4%
2-Nov-03	11,402	235	0	180	2,038	2,269	1,976	13,855	1,700	262	4,171	66	0	0	4,499	3,744	7,656	6,531	8,042	32.0%	27.0%	27.7%
3-Nov-03	11,474	235	0	180	1,914	2,159	1,930	13,803	1,244	3,974	4,393	58	0	0	8,425	5,500	4,135	6,677	6,740	60.6%	39.7%	40.6%
4-Nov-03	11,947	235	0	225	1,838	2,072	1,900	14,245	559	4,469	4,398	53	0	0	8,921	7,222	4,765	6,653	6,246	62.3%	51.7%	53.1%
5-Nov-03	11,774	235	0	573	1,809	1,988	1,872	14,391	559	4,645	4,352	42	0	19	9,058	8,744	4,774	6,498	5,952	62.5%	61.8%	63.9%
6-Nov-03	12,123	235	0	468	1,760	1,904	1,854	14,586	559	4,980	4,331	16	0	11	9,338	9,059	4,690	6,192	5,741	63.8%	62.9%	65.8%
7-Nov-03	12,003	235	0	352	1,765	1,848	1,848	14,355	331	5,280	4,330	20	0	26	9,656	9,306	4,369	5,545	5,545	66.9%	64.4%	67.6%
8-Nov-03	12,098	235	0	350	1,810	1,813	1,841	14,493	-1,089	4,492	4,345	23	0	45	8,904	9,252	6,677	5,295	5,687	61.0%	63.9%	67.0%
9-Nov-03	12,008	235	0	345	1,796	1,811	1,848	14,384	-8,848	4,493	4,338	27	0	53	8,911	9,092	14,321	6,247	6,646	61.4%	63.1%	65.5%
10-Nov-03	12,963	235	0	391	1,902	1,820	1,853	15,491	-9,076	5,995	4,348	62	0	68	10,473	9,337	14,094	7,670	7,391	66.8%	63.1%	66.5%
11-Nov-03	13,752	235	0	371	1,896	1,823	1,851	16,254	-9,076	5,985	4,358	74	0	63	10,479	9,839	14,851	9,111	8,069	63.6%	64.0%	69.1%
12-Nov-03	14,335	235	0	367	1,831	1,828	1,846	16,768	-8,848	6,284	4,287	63	0	69	10,703	10,419	14,913	10,559	8,639	63.0%	64.4%	72.0%
13-Nov-03	14,617	235	0	349	1,797	1,819	1,835	16,998	-7,022	6,647	4,334	59	0	68	11,109	10,632	12,912	11,734	8,968	64.6%	63.8%	71.8%
14-Nov-03	14,556	235	0	336	1,701	1,793	1,820	16,828	1,422	5,985	4,431	61	0	64	10,540	10,656	4,866	11,805	8,675	61.9%	63.2%	70.9%
15-Nov-03	13,766	235	0	333	1,626	1,766	1,806	15,960	1,700	4,979	4,341	59	0	60	9,439	10,239	4,821	11,540	8,418	58.4%	61.7%	67.5%
16-Nov-03	13,610	235	0	337	1,611	1,725	1,794	15,793	1,015	4,998	4,385	61	0	59	9,502	9,706	5,275	10,247	8,222	59.4%	59.9%	63.4%
17-Nov-03	13,337	235	0	338	1,610	1,684	1,783	15,520	1,015	4,494	4,397	60	0	59	9,010	9,197	5,495	9,019	8,061	57.3%	58.4%	59.6%
18-Nov-03	13,410	235	0	358	1,609	1,649	1,773	15,612	1,015	4,303	4,265	63	0	64	8,694	8,947	5,903	7,741	7,941	54.9%	57.2%	57.6%
19-Nov-03	13,380	235	0	347	1,592	1,621	1,763	15,554	1,015	4,322	4,345	72	0	69	8,809	8,709	5,730	6,429	7,825	55.7%	56.0%	55.8%
20-Nov-03	12,685	235	0	347	1,598	1,608	1,756	14,865	1,065	3,682	4,340	63	0	74	8,159	8,419	5,641	5,390	7,716	54.0%	54.9%	53.9%
21-Nov-03	12,466	235	0	349	1,608	1,602	1,747	14,658	1,750	3,258	4,350	47	0	72	7,728	8,100	5,180	5,435	7,595	51.9%	53.9%	51.7%
22-Nov-03	12,162	235	0	354	1,586	1,597	1,740	14,337	1,750	2,967	4,339	61	0	79	7,447	7,646	5,140	5,481	7,483	51.0%	52.3%	48.9%
23-Nov-03	12,030	235	0	355	1,576	1,596	1,734	14,196	1,750	2,476	4,327	63	0	75	6,941	7,240	5,505	5,513	7,397	47.9%	50.3%	46.3%
24-Nov-03	11,601	235	0	355	1,604	1,598	1,729	13,795	1,750	2,473	4,350	60	0	77	6,961	6,978	5,084	5,455	7,301	49.5%	49.5%	45.0%
25-Nov-03	11,351	235	0	356	1,619	1,595	1,723	13,561	1,800	2,467	4,392	61	0	80	7,000	6,829	4,761	5,292	7,199	50.6%	49.3%	44.6%
26-Nov-03	11,438	235	0	357	1,576	1,590	1,717	13,606	1,800	2,481	4,377	62	0	75	6,995	6,847	4,811	5,160	7,108	50.4%	50.1%	45.4%
27-Nov-03	11,837	235	0	357	1,559	1,582	1,710	13,988	1,850	1,494	4,327	61	0	78	5,960	6,513	6,178	5,237	7,073	41.6%	47.5%	43.8%
28-Nov-03	11,916	235	0	354	1,552	1,577	1,705	14,057	1,900	1,489	4,396	63	0	71	6,018	6,188	6,139	5,374	7,040	41.9%	44.6%	42.2%
29-Nov-03	11,484	235	0	355	1,553	1,572	1,699	13,627	1,900	2,495	4,349	52	0	71	6,967	6,184	4,760	5,320	6,961	50.2%	44.5%	42.6%
30-Nov-03	11,743	235	0	353	1,541	1,564	1,694	13,872	1,950	2,465	4,378	32	0	74	6,949	6,524	4,973	5,243	6,895	49.3%	47.1%	45.4%
Total	374,547	7,050	0	10,272	51,484	53,268	54,185	443,353	-10,859	114,628	129,483	1,635	0	1,620	247,366	240,614	206,846	210,386	221,008	1641.0%	1616.6%	1641.3%
Average	12,485	235	0	342	1,716	1,776	1,806	14,778	-362	3,821	4,316	55	0	54	8,246	8,020	6,895	7,013	7,199	54.7%	53.9%	54.7%

NOVEMBER 2003

**CONSOLIDATED STATE-FEDERAL SAN LUIS RESERVOIR  
DAILY OPERATIONS**

RUN DATE: December 19, 2003

DAY	ELEV	STORAGE		SAN LUIS PUMPING C.F.S.	RELEASE - C.F.S.			GAIN(+) OR LOSS(-) C.F.S.	EVAPORATION		PRECIP INCHES
		ACRE-FEET IN LAKE	CHANGE		POWER	PACHECO TUNNEL	SPILL		C.F.S.	INCHES	
		961,975									
1	448.70	959,408	-2,567	0	1,068	167	0	-58	10	.03	.03
2	447.95	952,014	-7,394	0	3,620	170	0	+62	26	.08	.00
3	448.28	955,265	+3,251	2,975	457	168	0	-711	51	.16	.09
4	448.88	961,185	+5,920	3,415	301	144	0	+15	38	.12	.00
5	449.86	970,881	+9,696	5,423	0	131	0	-404	0	.06	.00
6	450.66	978,821	+7,940	4,275	0	196	0	-76	45	.14	.00
7	451.37	985,885	+7,064	3,971	0	187	0	-222	23	.07	.07
8	451.87	990,870	+4,985	2,687	0	146	0	-28	23	.07	.04
9	453.13	1,003,469	+12,599	6,844	0	174	0	-318	36	.01	.11
10	453.66	1,008,784	+5,315	2,918	0	172	0	-66	36	.11	.09
11	454.65	1,018,738	+9,954	5,401	0	168	0	-214	29	.09	.00
12	455.39	1,026,199	+7,461	4,125	0	174	0	-189	33	.10	.00
13	456.78	1,040,262	+14,063	7,637	0	175	0	-372	30	.09	.00
14	458.01	1,052,759	+12,497	6,846	0	171	0	-375	39	.12	.00
15	459.26	1,065,510	+12,751	6,617	0	162	0	-26	26	.08	.01
16	460.55	1,078,721	+13,211	6,883	0	206	0	-17	17	.05	.02
17	461.14	1,084,781	+6,060	3,327	0	241	0	-30	30	.09	.00
18	461.67	1,090,234	+5,453	3,010	0	231	0	-30	30	.09	.00
19	462.38	1,097,554	+7,320	4,234	0	237	0	-307	23	.07	.00
20	463.10	1,104,992	+7,438	4,244	0	242	0	-252	17	.05	.00
21	463.38	1,107,890	+2,898	3,062	1,274	251	0	-77	40	.12	.00
22	462.87	1,102,614	-5,276	2,995	5,111	263	0	-281	43	.13	.00
23	463.89	1,113,173	+10,559	7,096	1,806	257	0	+290	60	.18	.00
24	463.60	1,110,168	-3,005	2,239	2,945	125	0	-685	44	.13	.00
25	463.59	1,110,064	-104	3,551	3,332	254	0	-18	27	.08	.00
26	463.58	1,109,961	-103	2,995	2,683	244	0	-120	27	.08	.00
27	464.13	1,115,662	+5,701	4,943	2,144	187	0	+262	23	.07	.00
28	463.94	1,113,691	-1,971	2,980	3,412	177	0	-385	27	.08	.00
29	463.71	1,111,307	-2,384	3,384	4,283	174	0	-129	17	.05	.00
30	464.79	1,122,517	+11,210	5,987	0	200	0	-136	10	.03	.01
<b>TOTALS</b>			<b>+160,542</b>	<b>124,064</b>	<b>32,436</b>	<b>5,794</b>	<b>0</b>	<b>-4,897</b>	<b>880</b>	<b>2.63</b>	<b>.47</b>
<b>ACRE-FEET</b>			<b>+160,542</b>	<b>246,081</b>	<b>64,337</b>	<b>11,492</b>	<b>0</b>	<b>-9,713</b>	<b>1,745</b>		

**SUMMARY**

	RELEASE (ACRE-FEET)			PRECIPITATION	
POWER	64,337	SPILL	0	THIS MONTH =	.47
PACHECO TUNNEL	11,492	TOTAL	75,829	JULY 1, 2003 TO DATE =	.90

NOVEMBER 2003

**CONSOLIDATED STATE-FEDERAL O'NEILL FOREBAY  
DAILY OPERATIONS**

RUN DATE: December 19, 2003

DAY	ELEV	STORAGE		INFLOW - C.F.S.			RELEASE - C.F.S.			* DELIV.	GAINS(+) OR LOSS(-) C.F.S.
		ACRE-FEET IN LAKE	CHANGE	O'NEILL PUMPING	S. LUIS GEN.	CALIF. AQUEDUCT	O'NEILL GEN.	S. LUIS PUMPING	DOS AMIGOS PUMPING		
		43,386									
1	219.96	43,048	-338	1,977	1,068	86	0	0	3,447		+145
2	221.58	47,283	+4,235	2,295	3,620	153	0	0	3,903		-30
3	221.90	48,124	+841	2,745	457	1,938	0	2,975	1,899		+157
4	222.64	50,086	+1,962	2,837	301	4,253	0	3,415	3,341		+353
5	221.20	46,285	-3,801	2,854	0	4,658	0	5,423	4,126		+120
6	220.40	44,192	-2,093	2,908	0	4,215	0	4,275	3,802		-101
7	220.70	44,975	+783	2,999	0	4,674	0	3,971	3,837		+529
8	221.60	47,336	+2,361	3,122	0	4,157	0	2,687	3,598		+197
9	219.47	41,785	-5,551	3,247	0	4,475	0	6,844	3,929		+253
10	221.76	47,756	+5,971	3,422	0	5,283	0	2,918	3,077		+300
11	222.40	49,447	+1,691	3,521	0	5,528	0	5,401	3,039		+243
12	223.64	52,759	+3,312	3,478	0	5,404	0	4,125	3,342		+255
13	222.93	50,859	-1,900	3,458	0	6,199	0	7,637	3,253		+275
14	222.48	49,660	-1,199	3,447	0	5,992	0	6,846	3,511		+313
15	220.81	45,263	-4,397	3,502	0	4,554	0	6,617	3,769		+113
16	218.90	40,330	-4,933	3,485	0	5,311	0	6,883	4,562		+162
17	219.60	42,119	+1,789	3,499	0	4,039	0	3,327	3,239		-70
18	220.60	44,714	+2,595	3,502	0	4,193	0	3,010	3,574		+198
19	220.56	44,609	-105	3,464	0	4,802	0	4,234	4,411		+327
20	219.51	41,887	-2,722	3,582	0	3,206	0	4,244	3,924		+8
21	220.44	44,296	+2,409	3,770	1,274	3,020	0	3,062	3,860		+73
22	223.37	52,035	+7,739	3,814	5,111	2,657	0	2,995	4,731		+45
23	220.08	43,360	-8,675	3,896	1,806	2,726	0	7,096	5,651		-55
24	221.32	46,600	+3,240	3,854	2,945	2,000	0	2,239	4,744		-182
25	221.56	47,230	+630	3,821	3,332	2,212	0	3,551	5,367		-129
26	222.43	49,527	+2,297	3,815	2,683	2,374	0	2,995	4,655		-63
27	220.46	44,348	-5,179	3,882	2,144	1,096	0	4,943	4,722		-67
28	221.31	46,574	+2,226	3,856	3,412	1,381	0	2,980	4,342		-204
29	223.15	51,447	+4,873	3,850	4,283	2,007	0	3,384	4,301		+2
30	219.84	42,738	-8,709	3,920	0	2,221	0	5,987	4,581		+177
<b>TOTALS</b>			<b>-648</b>	<b>101,822</b>	<b>32,436</b>	<b>104,814</b>	<b>0</b>	<b>124,064</b>	<b>118,537</b>		<b>+3,344</b>
<b>ACRE-FEET</b>			<b>-648</b>	<b>201,964</b>	<b>64,337</b>	<b>207,899</b>	<b>0</b>	<b>246,081</b>	<b>235,118</b>	<b>280</b>	<b>6,633</b>

\* DAILY DEL. FIGURES UNAVAILABLE. TOT. DEL. IS INCLUDED IN COMPUTING MONTHLY TOTALS

**SUMMARY**  
RELEASE (ACRE-FEET)

O'NEILL GEN.	0	DOS AMIGOS PUMP	235,118		
SAN LUIS PUMP	246,081	DELIVERIES	280	TOTAL	481,479

UNITED STATES DEPARTMENT OF THE INTERIOR  
 U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

Table 19

NOVEMBER 2003

FEDERAL-STATE OPERATIONS  
 SAN LUIS UNIT

RUN DATE: December 19, 2003

DAY	AQUEDUCT CHECK 12			O'NEILL			SAN LUIS						PACHECO PUMP	DOS AMIGOS			
	STATE	FED	TOTAL	PUMPING		GENER	FED	STATE	TOTAL	GENERATION		FED		STATE	TOTAL		
1	171	0	171	3,922	0	3,922	0	0	0	0	2,119	2,119	332	2,488	4,349	6,837	
2	303	0	303	4,552	0	4,552	0	0	0	0	7,180	7,180	337	2,443	5,298	7,741	
3	3,845	0	3,845	5,445	0	5,445	0	6,021	-120	5,901	0	907	907	333	2,475	1,291	3,766
4	8,436	0	8,436	5,628	0	5,628	0	4,418	2,356	6,774	0	598	598	286	2,508	4,118	6,626
5	9,239	0	9,239	5,660	0	5,660	0	3,646	7,110	10,756	0	0	0	259	2,480	5,703	8,183
6	8,361	0	8,361	5,768	0	5,768	0	3,630	4,849	8,479	0	0	0	388	2,414	5,128	7,542
7	9,271	0	9,271	5,949	0	5,949	0	3,141	4,735	7,876	0	0	0	371	2,060	5,551	7,611
8	8,245	0	8,245	6,192	0	6,192	0	2,421	2,908	5,329	0	0	0	289	2,069	5,068	7,137
9	8,876	0	8,876	6,440	0	6,440	0	9,206	4,370	13,576	0	0	0	346	1,992	5,801	7,793
10	10,478	0	10,478	6,788	0	6,788	0	3,978	1,809	5,787	0	0	0	341	2,051	4,053	6,104
11	10,965	0	10,965	6,984	0	6,984	0	3,118	7,594	10,712	0	0	0	333	2,129	3,898	6,027
12	10,718	0	10,718	6,898	0	6,898	0	3,144	5,038	8,182	0	0	0	346	2,164	4,464	6,628
13	12,296	0	12,296	6,858	0	6,858	0	6,243	8,904	15,147	0	0	0	347	2,122	4,331	6,453
14	11,886	0	11,886	6,838	0	6,838	0	6,538	7,041	13,579	0	0	0	339	1,549	5,415	6,964
15	9,033	0	9,033	6,946	0	6,946	0	6,673	6,451	13,124	0	0	0	321	1,529	5,947	7,476
16	10,535	0	10,535	6,912	0	6,912	0	9,873	3,780	13,653	0	0	0	408	1,572	7,476	9,048
17	8,011	0	8,011	6,940	0	6,940	0	4,144	2,455	6,599	0	0	0	479	1,492	4,932	6,424
18	8,317	0	8,317	6,946	0	6,946	0	5,429	542	5,971	0	0	0	458	1,518	5,572	7,090
19	9,524	0	9,524	6,871	0	6,871	0	5,933	2,466	8,399	0	0	0	470	1,520	7,229	8,749
20	6,360	0	6,360	7,104	0	7,104	0	5,598	2,819	8,417	0	0	0	480	1,489	6,295	7,784
21	5,991	0	5,991	7,477	0	7,477	0	5,948	126	6,074	0	2,526	2,526	498	1,514	6,142	7,656
22	5,271	0	5,271	7,565	0	7,565	0	5,963	-22	5,941	0	10,138	10,138	522	1,534	7,849	9,383
23	5,407	0	5,407	7,728	0	7,728	0	14,256	-181	14,075	0	3,583	3,583	509	1,055	10,154	11,209
24	3,967	0	3,967	7,644	0	7,644	0	4,587	-146	4,441	0	5,841	5,841	247	982	8,428	9,410
25	4,387	0	4,387	7,578	0	7,578	0	5,907	1,137	7,044	0	6,610	6,610	503	979	9,666	10,645
26	4,708	0	4,708	7,568	0	7,568	0	5,936	5	5,941	0	5,321	5,321	484	979	8,255	9,234
27	2,174	0	2,174	7,699	0	7,699	0	9,751	53	9,804	0	4,252	4,252	371	1,038	8,329	9,367
28	2,739	0	2,739	7,648	0	7,648	0	6,109	-198	5,911	0	6,767	6,767	351	949	7,663	8,612
29	3,981	0	3,981	7,637	0	7,637	0	6,825	-113	6,712	0	8,495	8,495	345	976	7,555	8,531
30	4,406	0	4,406	7,775	0	7,775	0	12,051	-175	11,876	0	0	0	397	1,054	8,032	9,086

  

AQUEDUCT CHECK 12	O'NEILL PUMPING		O'NEILL GENERATION	SAN LUIS PUMPING		SAN LUIS GENERATION		PACHECO PUMPING	DOS AMIGOS				
TOTAL	207,901	TOTAL	201,960	TOTAL	0	TOTAL	246,080	TOTAL	64,337	TOTAL	11,490	TOTAL	235,116
FEDERAL	0	FEDERAL	201,960			FEDERAL	170,487	FEDERAL	0	FEDERAL		FEDERAL	51,124
STATE	207,901	STATE	0			STATE	75,593	STATE	64,337	STATE		STATE	183,992
												XVC	0

COMMENTS: ALL VALUES IN ACRE-FEET

UNITED STATES DEPARTMENT OF THE INTERIOR  
 U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA

**Table 20**

**NOVEMBER 2003**

**FEDERAL-STATE OPERATIONS**

RUN DATE: December 19, 2003

DAY	TRACY PUMPING			CLIFT COURT TOTAL	DELTA PUMPING PLANT			FED BANKS XVC	STATE		AQEDUCT STATE	CHECK 21			DMC-POOL DEMANDS
	FED	STATE	TOTAL		STATE	FED	TOTAL		AMIGOS XVC	BYRON TOTAL		FED	TOTAL	TOTAL	
1	6,760	0	6,760	581	516	0	516	0	0	0	4,559	0	4,559	2,838	
2	8,274	0	8,274	519	541	0	541	0	0	0	5,591	0	5,591	3,722	
3	8,713	0	8,713	7,882	3,863	0	3,863	0	0	0	4,180	0	4,180	3,268	
4	8,724	0	8,724	8,865	9,661	0	9,661	0	0	0	4,474	0	4,474	3,096	
5	8,633	0	8,633	9,213	8,934	0	8,934	0	0	0	7,347	0	7,347	2,973	
6	8,591	0	8,591	9,877	9,446	0	9,446	0	0	0	6,498	0	6,498	2,823	
7	8,588	0	8,588	10,473	10,279	0	10,279	0	0	0	6,715	0	6,715	2,639	
8	8,618	0	8,618	8,909	8,673	0	8,673	0	0	0	6,839	0	6,839	2,426	
9	8,605	0	8,605	8,911	9,535	0	9,535	0	0	0	6,592	0	6,592	2,165	
10	8,625	0	8,625	11,892	11,569	0	11,569	0	0	0	4,495	0	4,495	1,837	
11	8,644	0	8,644	11,872	11,377	0	11,377	0	0	0	5,303	0	5,303	1,660	
12	8,504	0	8,504	12,464	11,817	0	11,817	0	0	0	5,441	0	5,441	1,606	
13	8,596	0	8,596	13,185	13,013	0	13,013	0	0	0	6,079	0	6,079	1,738	
14	8,788	0	8,788	11,871	11,871	0	11,871	0	0	0	5,649	0	5,649	1,950	
15	8,610	0	8,610	9,875	9,896	0	9,896	0	0	0	7,126	0	7,126	1,664	
16	8,697	0	8,697	9,913	10,926	0	10,926	0	0	0	7,416	0	7,416	1,785	
17	8,721	0	8,721	8,913	8,741	0	8,741	0	0	0	5,686	0	5,686	1,781	
18	8,459	0	8,459	8,535	9,310	0	9,310	0	0	0	6,766	0	6,766	1,513	
19	8,619	0	8,619	8,573	8,745	0	8,745	0	0	0	6,681	0	6,681	1,748	
20	8,609	0	8,609	7,304	7,648	0	7,648	0	0	0	6,310	0	6,310	1,505	
21	8,629	0	8,629	6,463	6,399	0	6,399	0	0	0	6,817	0	6,817	1,152	
22	8,607	0	8,607	5,886	5,843	0	5,843	0	0	0	8,178	0	8,178	1,042	
23	8,583	0	8,583	4,911	5,126	0	5,126	0	0	0	10,093	0	10,093	855	
24	8,629	0	8,629	4,906	4,884	0	4,884	0	0	0	8,041	0	8,041	985	
25	8,711	0	8,711	4,894	4,894	0	4,894	0	0	0	9,064	0	9,064	1,133	
26	8,681	0	8,681	4,921	4,943	0	4,943	0	0	0	8,003	0	8,003	1,113	
27	8,583	0	8,583	2,963	2,920	0	2,920	0	0	0	7,988	0	7,988	884	
28	8,719	0	8,719	2,954	2,868	0	2,868	0	0	0	8,261	0	8,261	1,071	
29	8,627	0	8,627	4,949	4,755	0	4,755	0	0	0	7,440	0	7,440	990	
30	8,683	0	8,683	4,890	4,847	0	4,847	0	0	0	7,861	0	7,861	908	
<b>TOTALS</b>	<b>256,830</b>	<b>0</b>	<b>256,830</b>	<b>227,364</b>	<b>223,840</b>	<b>0</b>	<b>223,840</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>201,493</b>	<b>0</b>	<b>201,493</b>	<b>54,870</b>	

COMMENTS: ALL VALUES IN ACRE-FEET

Table 21

U. S. Department of Interior - Bureau of Reclamation  
Central Valley Operations Office

**Central Valley Project - California  
2003**

Monthly Diversions in AF

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>CANALS</b>													
Contra Costa	12956	14249	15412	16333	15139	12943	15822	13162	9946	4353	3243		133558
Delta-Mendota	261583	236924	267282	112816	89901	262129	257780	264427	253450	264138	256828		2527258
Actual Fed Dos Amigos	62174	84109	70926	80774	85819	177721	211095	148067	56324	46188	NA		1023197
Madera	0	0	0	13220	44954	223582	59818	43847	21916	11437	0		418774
Friant-Kern	11709	25236	22047	76355	186269	57143	205266	146210	77126	55695	14555		877611
Corning	0	258	0	115	1452	3628	4064	3697	3033	1898	220		18365
Folsom-South	2434	2150	1503	2168	2684	2678	2737	2767	2676	2206	2678		26681
Sly Park - Camino Conduit	1041	922	1079	1073	1906	3882	4657	2527	2299	1904	902		22192
Tehama-Colusa	0	1519	4300	11669	31714	58521	59904	38579	20912	11703	724		239545
<b>CACHUMA PROJECT</b>													
Tecolote Tunnel	2158	1838	2197	1073	2172	2319	3208	3486	2970	2812	1856		26089
<b>KLAMATH PROJECT</b>													
"A" Canal Upper Klamath	0	0	0	0	25680	42640	60400	61020	39140	NA	NA		228880
Klamath Drainage District	12524	10825	9861	2831	2320	12547	11822	9870	11020	NA	NA		83620
Clear Lake Reservoir	0	0	0	0	2340	20860	3490	3260	3190	NA	NA		33140
Gerber Reservoir	0	0	0	0	2100	9960	4360	3700	2840	NA	NA		22960
Klamath River to Lost River	0	0	0	0	0	17607	9608	1933	11590	NA	NA		40738
<b>ORLAND PROJECT</b>													
Stony Creek	0	0	0	0	8503	18847	19686	17414	14939	9831	20		89240
South Canal	0	0	0	0	6383	12891	13601	12269	10635	6681	20		62480
North Canal	0	0	0	0	2120	5956	6085	5145	4304	3150	0		26760
<b>SOLANO PROJECT</b>													
Putah South Canal	3733	3201	4923	9362	17340	32490	37256	29116	23306	10784	2546		174057



Table 22

U. S. Department of Interior - Bureau of Reclamation  
Central Valley Operations Office

**Friant-Kern Canal  
2003**

Monthly Deliveries in AF

Water User	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Alpaugh ID	0	0	0	0	0	114	0	0	0	0	0	0	114
Arvin-Edison WSD	1707	2374	0	20465	51429	17279	0	5016	8636	6955	2214	0	116075
Atwell Island WD	0	0	0	0	0	0	0	0	0	0	0	0	0
Delano-Earlimart ID	0	2960	3771	7150	15362	25234	26958	15936	12119	9092	1793	0	120375
Exeter ID	0	10	79	136	679	2025	2909	2743	2390	1454	173	0	12598
City of Fresno	0	837	4	7	15	0	25830	29634	3261	762	34	0	60384
County of Fresno SA #34	4	3	20	15	48	79	95	80	62	45	10	0	461
Fresno ID	0	0	0	0	67	169	3651	0	0	0	0	0	3887
Garfield WD	0	0	61	174	278	491	525	388	316	217	12	0	2462
Hills Valley ID	0	0	17	33	404	699	905	792	774	547	98	0	4269
International WD	25	53	0	89	64	252	259	266	239	168	4	0	1419
Ivanhoe ID	0	0	0	952	2513	1341	2250	1679	1408	580	174	0	10897
Kaweah Delta WCD	0	0	0	0	0	386	0	0	0	0	0	0	386
Kern County Water Agency	0	0	0	0	0	0	0	0	0	0	0	0	0
Kern-Tulare WD	0	0	1715	1734	978	4247	4863	3942	3153	0	563	0	21195
Kings County WD	0	0	0	0	0	376	0	0	0	0	0	0	376
Kings River CD	0	0	0	0	0	3457	0	0	0	0	0	0	3457
Lewis Creek WD	0	0	0	0	0	0	0	0	0	0	0	0	0
Lindmore ID	0	0	129	828	2989	7697	9762	8858	6928	4595	549	0	42335
City of Lindsay	0	45	168	162	257	214	266	269	259	257	176	0	2073
Lindsay-Strathmore ID	5	117	0	0	0	2423	4368	4144	3662	2685	572	0	17976
Wutchurna (Lindsey-Strathmore non-proj)	0	0	202	723	1944	1179	0	0	0	0	0	0	4048
Lower Tule River ID	0	0	0	10194	35532	36555	31197	17992	0	0	0	0	131470
North-Kern WSD	0	0	0	0	0	0	0	0	0	0	0	0	0
City of Orange Cove	70	71	86	100	145	191	224	205	193	153	102	0	1540
Orange Cove ID	0	0	75	258	2910	5423	6290	6016	4978	3465	608	0	30023
Pixley ID	0	0	0	2342	9571	13482	11053	0	0	0	0	0	36448
Porterville ID	0	0	0	1284	2518	3567	3807	2113	902	401	0	0	14592
Rag Gulch WD	0	320	684	989	2690	1850	2104	1620	1543	701	152	0	12653
Rosedale Rio Bravo WSD	0	0	0	2582	21803	872	0	0	0	0	0	0	25257
Saucelito ID	0	321	1840	2232	4822	6896	6558	4965	2968	268	432	0	31302
Semitropic WSD	0	0	0	0	0	0	0	0	0	0	0	0	0
Shafter Wasco ID	541	5629	3670	3579	7988	11240	11475	6923	4464	4585	1005	0	61099
Southern San Joaquin MUD	0	5260	5151	7096	13274	20789	22953	15457	11494	7351	1470	0	110295
Smallwood Vineyards	0	0	33	62	72	113	114	48	4	0	0	0	446
Stone Corral ID	0	0	9	232	780	1614	1822	1629	1278	852	149	0	8365
Strathmore PUD	0	19	19	19	34	42	51	42	47	43	22	0	338
Styro Tek, Inc.	0	0	1	0	1	0	1	1	0	1	0	0	5
Tea Pot Dome WD	0	0	0	160	495	1039	1267	1129	983	703	185	0	5961
Terra Bella ID	0	0	125	449	1538	3178	4000	3547	3204	2155	472	0	18668
Tri-Valley WD	0	0	0	0	25	232	314	356	266	246	37	0	1476
Tulare ID	0	2692	0	11459	28428	31717	10055	5170	0	0	0	0	89521
	0	0	0	0	0	10270	0	0	0	0	0	0	10270
<b>Total</b>	<b>2352</b>	<b>20711</b>	<b>17859</b>	<b>75505</b>	<b>209653</b>	<b>216732</b>	<b>195926</b>	<b>140960</b>	<b>75531</b>	<b>48281</b>	<b>11006</b>	<b>0</b>	<b>1014516</b>

\* Data supplied by Fresno Field Division, Contracts Administration Division

Table 23

U. S. Department of Interior - Bureau of Reclamation  
Central Valley Operations Office

**Madera Canal and Millerton Lake  
2003**

Monthly Deliveries in AF

Water Users	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>MADERA CANAL</b>													
Chowchilla WD	0	0	0	4856	15650	20807	24536	22134	11544	0	0		99527
Madera ID	0	0	0	4679	25629	33684	31464	10677	10747	12145	0		129025
Soquel	0	0	0	0	0	0	0	9461	0	0	0		9461
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>9535</b>	<b>41279</b>	<b>54491</b>	<b>56000</b>	<b>42272</b>	<b>22291</b>	<b>12145</b>	<b>0</b>	<b>0</b>	<b>238013</b>
<b>MILLERTON LAKE</b>													
County of Madera	1	2	3	3	5	7	8	7	6	6	3		51
Fresno County # 18	5	5	7	8	14	20	24	21	18	6	8		136
Gravelly Ford WD	0	2	345	1146	740	1288	1107	1098	1551	1409	0		8686
<b>Total</b>	<b>6</b>	<b>9</b>	<b>355</b>	<b>1157</b>	<b>759</b>	<b>1315</b>	<b>1139</b>	<b>1126</b>	<b>1575</b>	<b>1421</b>	<b>11</b>	<b>0</b>	<b>8873</b>

\* Data supplied by Fresno Field Division, Contracts Administration Division

**Table 24**

U.S. Department of Interior - Bureau of Reclamation  
Central Valley Operations Office

**San Joaquin and Mendota Pool  
2003**

Monthly Deliveries in AF

Water User	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Fresno Slough WD	0	714	184	149	354	760	998	783	301	67	0		4310
Hughes, Melvin	0	21	0	0	0	19	30	23	0	0	0		93
James ID	0	2341	546	1066	2420	9634	9517	8224	3716	580	76		38120
Laguna WD	0	0	0	0	0	0	0	0	0	0	0		0
Dudley & Indart	0	910	301	124	490	813	727	684	224	63	0		4336
Mid-Valley WD (no contract)	0	0	0	368	0	0	0	0	0	0	0		368
Reclamation 1606	0	0	0	41	41	55	67	23	0	0	0		227
Terra Linda (Goodman)	0	798	624	779	816	1418	1819	1225	531	252	232		8494
Tranquility ID	65	5203	1071	475	2687	6364	6395	4540	928	221	36		27985
Wilson, JW (no contract)	0	169	18	0	0	165	200	165	48	0	0		765
<b>Total</b>	<b>65</b>	<b>10156</b>	<b>2744</b>	<b>3002</b>	<b>6808</b>	<b>19228</b>	<b>19753</b>	<b>15667</b>	<b>5748</b>	<b>1183</b>	<b>344</b>	<b>0</b>	<b>84698</b>
<b>Exchange Contractors</b>													
Central California ID	279	36522	<b>31255</b>	21112	36100	75416	88388	89888	28255	30485	3773		441473
Columbia Canal Co	2	3648	5595	5451	5867	8815	10451	9376	5006	2733	18		56962
Firebaugh Canal Co	218	234	1258	2398	2523	3518	4025	10139	2009	1694	1052		29068
San Luis Canal Co	0	4059	13742	8446	13050	27471	29032	26268	11214	1353	999		135634
<b>Total</b>	<b>499</b>	<b>44463</b>	<b>51850</b>	<b>37407</b>	<b>57540</b>	<b>115220</b>	<b>131896</b>	<b>135671</b>	<b>46484</b>	<b>36265</b>	<b>5842</b>	<b>0</b>	<b>663137</b>
<b>Refuges</b>													
Grassland WD - 76.05L CCID #1-07-20-W1754	9348	12037	6037	5091	16878	6908	4223	17237	73699	30211	15628		197297
US F&WS - Kesterson #00-WC-20-1647	4679	1243	1241	2672	0	2393	5497	302	918	9279	2815		31039
State F&WS - DWR #00-WC-20-1647 Kern National Wildlife	1136	2139	1233	220	294	87	0	1055	3509	6329	4895		20897
State F&G - Water Fowl Dist #1-07-20-W19756	4075	2454	1554	521	1527	2226	2733	3100	8664	9811	5316		41981
DFG Traction Ranch - Mendota Pool #14-06-200-7859Z	497	427	315	307	546	1324	553	583	863	1347	510		7272
<b>Total</b>	<b>19735</b>	<b>18300</b>	<b>10380</b>	<b>8811</b>	<b>19245</b>	<b>12938</b>	<b>13006</b>	<b>22277</b>	<b>87653</b>	<b>56977</b>	<b>29164</b>	<b>0</b>	<b>298486</b>

Table 25

U. S. Department of Interior - Bureau of Reclamation  
Central Valley Operations Office

## Monthly Deliveries in AF

**Delta-Mendota Canal**  
**2003**

Water User	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Banta Carbona ID	0	0	0	224	373	327	1128	125	0	0	0		2177
Broadview WD	1013	1646	930	480	661	2868	3126	1729	379	233	0		13065
CCID (Abv CK 13)	240	139	1108	748	2222	2124	2426	2039	1980	756	369		14151
CCID (Blw CK 13)	0	1347	4429	664	9983	13860	23806	10192	159	69	111		64620
Centinella WD	0	0	0	0	0	0	0	0	0	0	0		0
China Island (76.05)	0	1043	833	426	365	0	732	0	0	0	0		3399
Del Puerto WD	151	1735	3527	7750	11081	15094	18647	12104	8163	4404	599		83255
DWR Intertie @MP7.70-R	0	0	0	0	0	0	0	0	0	0	0		0
Eagle Field WD	59	425	142	50	11	548	660	499	179	6	101		2680
Firebaugh Canal	2202	5784	1170	454	924	6816	9547	6399	458	109	668		34531
Frietas Unit (76.05L)	0	1078	1258	835	795	0	904	0	0	0	0		4870
Mercy Springs WD	0	156	57	249	136	309	362	308	86	84	25		1772
Oro Loma WD	0	281	0	0	0	277	293	250	0	2	0		1103
Panoche WD - Ag	422	660	351	232	303	1156	1643	985	308	151	66		6277
Panoche WD - M&I	2	3	2	3	2	3	2	3	2	3	2		27
Patterson WD	0	209	354	336	866	1059	1592	939	362	279	79		6075
Plainview WD	19	48	211	367	464	476	559	468	386	256	30		3284
Salt Slough Unit (76.05L)	0	926	992	723	1021	0	1217	0	0	0	0		4879
San Luis WD - Ag	38	1841	812	818	797	2128	2782	1725	737	374	75		12127
San Luis WD - M&I	1	1	3	3	12	35	31	24	26	13	1		150
Tracy, City of	104	361	571	720	958	1187	1301	1306	1266	1223	657		9654
West Side ID	0	0	0	0	0	22	152	226	0	0	0		400
Widren	0	54	0	0	0	16	25	17	0	0	14		126
W. Stanislaus ID	0	556	1600	4081	4160	4951	8242	7180	5451	2655	326		39202
F&G - Los Banos Ref. 76.05L	0	1068	1168	538	1044	393	0	0	0	0	0		4211
Volta Wildlife Mgmt Area (F&G)	109	17	127	195	330	158	147	615	2157	1627	522		6004
Grasslands WD -76.05L	5851	3441	1085	725	7580	6214	2675	13777	19928	7041	7141		75458
Grasslands WD - Volta	1286	1253	1139	0	1406	336	494	0	10350	10092	2599		28955
F&S (Volta) Santa Fee Kest.	0	0	0	0	0	0	0	0	750	1298	1002		3050
F&S - Kesterson 76.05L	0	665	819	512	778	0	0	0	0	0	0		2774
<b>Total DMC Deliveries</b>	<b>11497</b>	<b>24737</b>	<b>22688</b>	<b>21133</b>	<b>46272</b>	<b>60357</b>	<b>82493</b>	<b>60910</b>	<b>53127</b>	<b>30675</b>	<b>14387</b>	<b>0</b>	<b>428276</b>
Oneill Net Pumped	222449	122252	167000	34494	(53271)	42298	(7025)	43096	76711	134563	201960		984527
DMC plus Oneill	233946	146989	189688	55627	(6999)	102655	75468	104006	129838	165238	216347	0	1412803

\* Data supplied by San Luis Delta-Mendota Water Authority

Table 26

U. S. Department of Interior - Bureau of Reclamation  
Central Valley Operations Office

**San Luis and Cross Valley Canals  
2003**

Monthly Deliveries in AF

Water User	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
<b>SAN LUIS CANAL</b>													
City of Avenal	183	166	190	191	244	284	313	289	270	255	209		2411
Broadview WD	4	1	0	2	1	4	3	3	2	3	1		20
City of Coalinga	310	423	197	501	540	899	1026	888	929	790	347		6540
City of Dos Palos	62	68	78	95	141	173	197	161	153	122	80		1268
City of Huron	43	50	64	90	83	104	123	120	154	94	120		1002
Pacheco WD	225	399	179	126	1	1271	2742	1926	189	141	1		6975
Pacheco CCID Non-project (Hamburg)	457	984	537	0	1174	1615	0	0	0	0	0		4767
Panoche WD	3032	6457	3102	4068	4763	8981	12765	8019	1180	661	540		53568
San Luis WD	1677	5012	4798	5688	6803	11505	14290	8916	2728	3433	1330		66180
Westlands WD (Federal)	54952	72952	62666	74922	91722	171127	189035	132189	49909	42139	32811		974424
Phase I (Non-chargeable)	1	5	0	0	0	3	0	0	0	4	5		18
Fish & Game (Lateral 4)	1	0	1	1	2	2	2	3	3	3	1		19
Fish & Game (Lateral 6)	0	0	0	0	0	0	0	0	0	0	0		0
<b>Total</b>	<b>60947</b>	<b>86517</b>	<b>71812</b>	<b>85684</b>	<b>105474</b>	<b>195968</b>	<b>220496</b>	<b>152514</b>	<b>55517</b>	<b>47645</b>	<b>35236</b>	<b>0</b>	<b>1117810</b>
<b>O'NEILL FOREBAY DELIVERIES</b>													
Oneill Forebay Wildlife	40	25	69	2	99	111	168	52	64	65	112		807
San Luis WD Ag	32	690	582	975	1202	1852	2298	1500	617	732	138		10618
San Luis M&I	37	32	21	33	61	69	94	81	82	74	30		614
VA Cemetary	1	4	3	4	7	9	14	16	15	7	3		83
<b>Total</b>	<b>110</b>	<b>751</b>	<b>675</b>	<b>1014</b>	<b>1369</b>	<b>2041</b>	<b>2574</b>	<b>1649</b>	<b>778</b>	<b>878</b>	<b>283</b>	<b>0</b>	<b>12122</b>
<b>CROSS VALLEY CANAL</b>													
County of Fresno	0	0	0	216	0	0	0	0	0	0	0		216
County of Tulare	0	0	0	383	0	0	0	0	0	0	0		383
Lower Tule River ID	0	0	0	0	0	0	0	0	0	0	0		0
Pixley ID	0	0	0	0	0	0	0	0	0	0	0		0
Kern-Tulare WD	0	0	0	1075	0	0	0	0	0	0	0		0
Rag Gulch WD	0	0	0	358	0	0	0	0	0	0	0		0
Hills-Valey ID	0	0	0	242	0	0	0	0	0	0	0		0
Tri-Valley ID	0	0	0	82	0	0	0	0	0	0	0		82
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2356</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2356</b>
<b>SAN FELIPE DIVISION</b>													
Santa Clara	3970	1985	6652	9606	9644	10827	15341	15191	929	10245	10972		95362
San Benito	254	1407	623	397	1139	3824	5164	5079	2770	2194	518		23369
<b>Total</b>	<b>4224</b>	<b>3392</b>	<b>7275</b>	<b>10003</b>	<b>10783</b>	<b>14651</b>	<b>20505</b>	<b>20270</b>	<b>3699</b>	<b>12439</b>	<b>11490</b>	<b>0</b>	<b>118731</b>

\* Data supplied by Fresno Field Division, Contracts Administration Division for San Luis Canal and Cross Valley Canal.  
Tracy Field Division, Water Division for O'Neill Forebay.

Table 27

U. S. Department of Interior - Bureau of Reclamation  
Central Valley Operations Office

**Tehama-Colusa Canal**  
**2003**

## Monthly Deliveries in AF

Water Users	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
Colusa County WD	73	120	1053	2479	5279	12355	13246	7332	4143	3779	792		50651
Cortina WD	0	0	0	37	100	272	278	96	44	52	16		895
Davis WD	0	2	17	339	126	401	598	426	97	28	0		2034
Dunnigan WD	8	22	133	455	1334	3237	3495	1970	1283	476	26		12439
4-M Water District	0	3	7	85	225	305	406	273	230	23	1		1558
GCID	0	43	960	2135	3319	4905	4810	4844	3200	1218	277		25711
Glenn Valley WD	0	0	0	0	32	73	177	119	16	0	0		417
Glide WD	0	8	9	269	2498	3177	4123	2532	575	331	0		13522
Holthouse WD	0	7	24	109	329	403	549	384	204	96	2		2107
Kanawha WD	3	27	146	737	2470	7036	7815	4865	1983	729	47		25858
Kirkwood WD	0	0	0	0	36	111	132	113	68	51	0		511
La Grande WD	0	0	0	624	1247	1427	1291	1001	56	323	41		6010
Myers-Marsh MWC	0	0	25	47	149	261	154	0	0	0	0		636
Orland-Artois WD	14	120	29	518	6581	13098	15059	9912	5194	2730	109		53364
Westside WD	0	40	453	2326	4180	9425	8327	5463	1766	826	124		32930
<b>Total</b>	<b>98</b>	<b>392</b>	<b>2856</b>	<b>10160</b>	<b>27905</b>	<b>56486</b>	<b>60460</b>	<b>39330</b>	<b>18859</b>	<b>10662</b>	<b>1435</b>	<b>0</b>	<b>228643</b>

Data supplied by Willows Field Division, Water and Land Division

Table 28

U. S. Department of Interior - Bureau of Reclamation  
Central Valley Operations Office

Monthly Deliveries in AF

**Sacramento River**  
**2003**

Water Users	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
A&F Boeger Corp & Thunder Farms	0	0	0	207	363	304	537	373	119	143	0		2046
Anderson Cottonwood ID	0	0	0	6184	14829	19488	18866	18330	17583	12472	0		107752
Andreotti, Arthur, et al	0	0	0	0	400	707	724	631	268	0	0		2730
Baber, Jack, et	0	0	0	0	228	680	718	324	0	187	0		2137
A&R Farms (Odysseus)	0	0	0	0	15	5	53	32	40	16	0		161
Cannel, Fred	0	0	0	0	10	274	205	0	23	283	0		795
Carter, Jane	0	0	0	0	142	554	303	115	228	51	0		1393
Colusa Prop. Inc	0	0	0	0	10	1	98	0	0	0	0		109
Conaway Conservancy Group	0	0	0	0	3815	5535	6556	5484	740	2504	0		24634
Davis, Olive P, et al	0	0	0	1312	5674	4869	5978	5002	333	0	0		23168
Deseret Farms of Calif	0	0	0	0	45	287	328	176	6	0	0		842
Dommer, Elizabeth	0	0	0	0	0	2	3	2	2	0	0		9
Forry, David G, et al	0	0	0	0	112	242	518	369	125	0	0		1366
Forster, Rosemary	0	0	0	0	474	330	384	303	2	0	0		1493
Furlan Joint Venture (Area #1)	0	0	0	0	0	49	66	0	0	0	0		115
Furlan Joint Venture (Area #2)	0	0	0	0	0	0	0	0	0	0	0		0
Glenn-Colusa ID	0	0	0	<b>43449</b>	<b>123213</b>	<b>133462</b>	<b>156548</b>	<b>118732</b>	<b>38601</b>	57630	0		671635
Griffin, J, et al	0	0	0	0	429	550	121	174	341	0	0		1615
Henle Family Limited Partnership	0	0	0	14	115	215	92	5	0	0	0		441
Hershey Land Co	0	0	0	0	100	219	335	284	108	0	0		1046
Hiatt, Glenn	0	0	0	0	28	303	283	122	179	0	0		915
Hollins, Mariette B	0	0	0	7	194	178	210	164	11	0	0		764
Howald Farms	0	0	0	0	106	223	152	51	125	0	0		657
King, Barbara	0	0	0	0	0	2	2	2	2	0	0		8
Knaggs Walnut Ranches Co, L.P.	0	0	0	0	0	0	0	0	0	0	0		0
Lockett, William P.	0	0	0	0	0	2	144	0	0	0	0		146
Loma Cold Storage/J Micheli	0	0	0	18	1031	1556	686	273	0	0	0		3564
M&T Inc.	0	0	0	0	862	1003	1810	1419	78	1526	0		6698
MCM Properties, Inc	0	0	0	0	0	60	77	24	0	0	0		161
Maxwell ID	0	0	0	239	399	110	0	0	0	571	0		1319
Meridan Farms WC	0	0	0	183	2959	2992	4937	5464	1255	0	0		17790
Natomas Central MWC	0	0	0	1290	12566	16459	23861	17875	4112	983	0		77146
O'Brien, Janice	0	0	0	0	87	277	233	59	51	0	0		707
Oji Bros. Farms Inc	0	0	0	129	346	674	782	370	172	0	0		2473
Oji, Mitsue Family PTN	0	0	0	0	278	1045	642	0	0	0	0		1965
Pelger Mutual WC	0	0	0	98	1413	1330	620	581	93	1015	0		5150
Pleasant Grove-Verona MWC	0	0	0	0	1966	3217	4413	2672	457	0	0		12725
Princeton,-Codora-Glenn ID	0	0	0	2992	11804	11486	13726	9582	2759	5865	0		58214
Provident Irrigation District	0	0	0	3210	12461	11187	13824	5903	266	10107	0		56958
Reclamation Dist #108	0	0	0	2087	26250	31745	38176	26084	3987	3930	0		132259
Reclamation Dist #1004	0	0	0	943	9726	10597	15947	12054	4045	11768	0		65080
Reynen, John, et al	0	0	0	0	807	976	1668	1223	82	0	0		4756
River Garden Farms	0	0	0	396	4160	4473	4350	3782	1084	337	0		18582
Roberts Ditch Irrigation Co	0	0	0	0	368	765	1113	790	354	0	0		3390
Sartain Mutual WC	0	0	0	0	276	462	508	292	0	0	0		1538
Siddiqui, J & A & Siddiqui Family Plan	0	0	0	0	2	69	162	212	94	7	0		546
Spence, Ruth Ann	0	0	0	0	0	0	0	0	0	0	0		0
Sutter Mutual WC	0	0	0	3787	28891	38509	46943	42932	11650	1737	0		174449
Swinford Tract Irrigation Co	0	0	0	0	0	0	27	23	0	0	0		50
Tarke, James, et al	0	0	0	0	184	328	375	336	79	0	0		1302
Tisdale Irrigation & Drain	0	0	0	45	1096	1853	1834	1606	576	0	0		7010
Wallace Construction, Inc.	0	0	0	0	0	0	300	187	0	0	0		487
Wells, Joyce M	0	0	0	8	210	237	279	217	15	1	0		967
Wilson Ranch Partnership	0	0	0	0	0	0	0	0	0	0	0		0
Windswept Land & Livestock Co.	0	0	0	0	75	412	297	35	0	11	0		830
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>66598</b>	<b>268519</b>	<b>310303</b>	<b>370814</b>	<b>284670</b>	<b>90045</b>	<b>111144</b>	<b>0</b>		<b>1502093</b>

\* Data supplied by Willows Field Division, Water and Land Division (long-form contracts only)

**Table 29**

U. S. Department of the Interior - Bureau of Reclamation  
Central Valley Operations Office

**Sacramento-San Joaquin Valley - Streamflow Data  
2003**

Mean monthly flow in cfs

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Sacramento River</b>												
Shasta computed inflow	17179	8836	11080	13642	13087	5613	4017	3314	3531	3428	4423	
At Keswick	13500	9498	4232	7639	16172	12924	13830	10311	7694	6797	5652	
At Bend Bridge	25382	13674	12271	12384	22852	14627	14595	11091	8212	7345	7103	
At Vina Bridge	38278	17020	11719	14887	26386	15700	14762	11023	8076	7380	7510	
At Ord Ferry	35335	15687	12185	14171	24485	12350	11271	8840	7289	5829	5856	
At Colusa	30523	17735	12519	13086	21861	11352	9701	7832	6618	5029	5005	
Below Wilkins Slough	24623	17618	12638	12632	18827	10231	8228	6821	6583	5176	5178	
At Verona	46013	29817	20277	19263	35128	18772	20194	17847	14420	9659	10749	
Sacramento at "I" Street	49929	33707	22335	20590	39805	22640	22828	20190	16025	11547	12766	
<b>Miscellaneous Stations</b>												
Folsom computed inflow	3942	3227	3683	5851	8030	4130	1938	1557	1568	844	1267	
American R at Nimbus Dam	2626	4300	2019	2043	5621	4216	3322	2697	1788	1968	2035	
Kings River at Pine Flat	111	94	401	706	2069	6585	6506	1775	1396	835	153	
<b>San Joaquin River</b>												
At Friant Dam	104	103	114	146	162	386	250	226	236	202	134	
Near Vernalis	2211	2198	2191	2573	2569	2109	1397	1337	1331	1960	1674	
<b>Putah Creek</b>												
Berryessa computed inflow	1328	564	736	750	473	28	1	-7	-16	-43	9	
Putah Creek - Lake Solano	26	195	337	281	481	43	43	34	26	25	27	
<b>Stanislaus River</b>												
New Melones computed inflow	1068	962	1143	1710	2529	2459	961	767	747	396	470	
At Tulloch Dam	305	533	1123	1697	1941	2625	2149	1775	1184	717	307	
At Orange Blossom	212	539	454	726	695	1046	426	460	428	590	451	

\* Data supplied by Central Valley Operations Coordinations Office  
Daily mean is derived from 7 am daily reading.