

File 5625



United States Department of the Interior

BUREAU OF RECLAMATION
Central Valley Operations Office
3310 El Camino Avenue, Suite 300
Sacramento, California 95821

STATE WATER RESOURCES
CONTROL BOARD
2013 AUG 21 PM 1:07
DIV OF WATER RIGHTS
SACRAMENTO

IN REPLY
REFER TO:

CVO-400
WTR-4.10

AUG 19 2013

Ms. Barbara Evoy
Deputy Director, Division of Water Rights
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812

Subject: Monitoring and Reporting Program on Water Rights Order No. 90-5 (Water Rights)

Dear Ms. Evoy:

For the month of July, the temperature control point was set at Airport Road, per the recommendation of the Sacramento River Temperature Task Group (SRTTG). There is no temperature monitoring station at Airport Road Bridge. USBR will operate to a surrogate target temperature of 56.75 °F at Balls Ferry, with the intention of achieving 56.0 °F at Airport Road Bridge. The surrogate temperature objective at Balls Ferry may change during the summer as needed to ensure meeting 56 °F at Airport Road Bridge. The group will continue to assess the cold water pool condition throughout the summer operations

During July 2013, the average daily water temperature compliance of 56.75 °F or less was met at the Balls Ferry compliance point on the Sacramento.

During the month of July 2013, the average monthly water temperature was 56.0 °F at Balls Ferry.

Enclosed is the monitoring report for July 2013, under Order No. 90-5. The report contains the following data:

Station	Description
Shasta Inlets (R-1)	Water Temperature Profile
“	Turbidity, monthly, ntu
Shasta Dam (R-2)	Water Temperature, daily average, degrees F
“	Turbidity, ntu, monthly
Shasta Dam (R-2a)	Flow, average daily, cfs

Station	Description
Keswick (R-3) “	Water Temperature, daily average, degrees F Turbidity, ntu, monthly
Keswick (R-3a)	Flow, average daily, cfs
Spring Creek Power plant (R-4) “	Water Temperature, daily average, degrees F Turbidity, ntu, monthly Flow, average daily cfs
Jellys Ferry (R-5) (Control Point)	Water Temperature, daily average, degrees F Turbidity, ntu, monthly
Sacramento at Delta (R-6)	Water Temperature, monthly, degrees F Turbidity, ntu, monthly
McCloud (R-7) “	Water Temperature, monthly, degrees F Turbidity, ntu, monthly
Pit River (R-8) “	Water Temperature, monthly, degrees F Turbidity, ntu, monthly
Lewiston (R-9)	Water Temperature, daily average, degrees F
Lewiston (R-9a)	Flow, average daily, cfs

If you have any questions regarding this data, please contact Thuy Washburn at 916-979-2193.

Sincerely,



Elizabeth Kiteck
Chief Water Operations

Enclosures

cc: Kari Kyler
Division of Water Rights
State Water Resources Control Board
P.O. Box 2000
Sacramento, CA 95812
(w/encl)

Central Valley Operations Office
 Data available from the California Data Exchange Center
Water Temperature Data in Degrees F
July 2013

Req. Sampling Frequency - Daily Average (Reading indicates daily average)							Control Pt 7/1 to 7/31			Req. Sampling Frequency - Monthly		
Date	Sta 2 Shd	Sta 3 Kwk	Sta 4 Spp	Sta 5 Bsf	Sta9 Lws		Sta 6 Dlt	Sta 7 Mss	Sta 8 Pmn			
1	51.0	52.5	53.4	55.02	50.7							
2	51.3	52.6	53.4	55.30	51.0							
3	51.3	52.8	53.5	55.44	50.7							
4	51.5	52.8	53.5	55.45	51.3							
5	51.8	53.0	53.6	55.58	51.2							
6	51.8	53.2	53.6	55.64	51.3							
7	52.3	53.4	53.6	55.66	51.7							
8	52.2	53.5	53.7	55.80	51.6							
9	52.4	53.6	53.8	55.84	51.2							
10	52.6	53.8	53.8	56.05	51.2							
11	52.9	53.9	53.9	56.12	51.4							
12	53.0	54.1	53.8	56.15	51.5							
13	53.2	54.2	53.9	56.42	51.3							
14	53.2	54.5	54.0	56.58	51.2							
15	52.8	54.5	54.0	56.58	51.2							
16	52.5	54.1	54.1	56.68	51.2							
17	52.7	53.9	54.2	56.08	51.1				66.6			
18	52.7	54.1	54.2	56.26	50.8							
19	52.0	54.2	54.2	56.54	50.6							
20	51.7	53.8	54.2	56.55	50.8							
21	52.6	53.6	54.2	56.35	51.0							
22	52.0	54.0	54.2	56.47	51.7							
23	52.1	53.9	54.2	56.41	51.6		71.1	65.5				
24	51.7	53.9	54.3	56.30	51.5							
25	51.2	53.3	54.4	56.25	51.2							
26	51.5	53.4	54.4	56.06	51.2							
27	51.4	53.5	54.4	56.15	50.9							
28	51.2	53.7	54.5	56.29	50.8							
29	50.0	53.5	54.5	56.05	50.6							
30	50.1	52.2	54.5	55.42	50.4							
31	50.3	52.4	54.5	54.83	50.4							

Control Point: Balls Ferry 56.0 from 03/01/2013 to 05/16/2013.
Balls Ferry 56.75 for compliance of 56.0 at Airport Road from 05/17/2013 to 07/31/2013

Cross Channel Gate Operation:
 July 1-31 Open

**Measurements taken by the Northern CA Area Office Personnel
July 2013**

TEMPERATURE			
Sampling Frequency Every two weeks May 1 through November 30.			
	Sample 1	Sample 2	Sample 3
	7/2/2013	7/22/2013	
Lake Elev	Temperature	Temperature	Temperature
MSL	Degrees F	Degrees F	Degrees F
(400 Feet Upstream of Dam)			
	Time: 11:20	Time: 13:30	Time:
625	44.7	44.7	
650	44.7	44.7	
675	44.7	44.8	
700	44.8	44.8	
725	44.9	44.9	
750	45.0	45.0	
775	45.2	45.2	
800	45.5	45.6	
825	45.9	46.1	
850	46.6	47.5	
875	47.7	48.8	
900	49.1	52.9	
925	52.0	62.2	
950	61.5	69.0	
975	72.3	80.5	
1000	79.2		
1025			
1050			
Lake Surface	1004.08' 79.3	988.11' 82.5	

TURBIDITY			
Sampling Frequency Monthly, except weekly May 1 through Sep 30, when turbidity at Station 2 is equal to or greater than 10 NTU			
	Sample 1	Sample 2	Sample 3
	7/2/2013	7/22/2013	
Lake Elev	Turbidity	Turbidity	Turbidity
MSL	ntu	ntu	ntu
(400 Feet Upstream of Dam)			
	Time: 11:20	Time: 13:30	Time:
625	1.8	1.7	
650	1.5	1.5	
675	1.5	1.5	
700	1.4	1.6	
725	1.5	1.4	
750	1.4	1.5	
775	1.4	1.4	
800	1.3	1.4	
825	1.2	1.2	
850	1.1	1.0	
875	0.9	0.9	
900	0.8	0.7	
925	0.6	0.6	
950	0.4	0.6	
975	0.4	1.1	
1000	0.8		
1025			
1050			
Lake Surface	1004.08' 0.8	988.11' 1.0	

SHASTA LAKE, DAM AND POWERPLANT

QG

GENERATION RELEASE, CFS

WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	4,124	5,563	1,867	1,942	4,140	3,723	5,522	10,745	9,222	10,852		
2	4,133	5,470	1,003	2,470	4,377	3,316	4,008	10,681	8,569	11,118		
3	4,663	5,396	2,124	2,013	3,455	3,276	4,867	10,245	9,108	11,041		
4	3,944	5,340	3,234	2,568	4,491	3,437	4,338	10,189	8,512	11,049		
5	4,155	5,858	1,246	2,762	3,151	3,744	4,688	9,710	8,960	11,552		
6	4,148	5,477	3,050	2,606	4,354	3,427	4,692	10,582	9,814	11,103		
7	4,239	4,960	2,102	3,614	4,052	3,498	4,593	11,064	11,138	11,552		
8	4,529	5,187	2,219	3,090	3,806	4,508	5,301	11,505	11,152	11,340		
9	4,087	5,361	3,961	3,129	3,810	3,153	5,489	11,716	10,335	10,987		
10	4,984	5,161	4,699	5,621	3,389	4,649	5,217	11,619	10,300	10,750		
11	4,553	5,074	3,196	4,070	3,725	4,895	4,744	11,344	10,461	11,552		
12	4,420	5,261	4,034	3,254	3,593	4,214	5,063	10,483	10,203	10,239		
13	4,329	5,182	3,912	3,422	3,596	4,466	4,593	11,497	10,476	10,954		
14	4,532	5,238	3,988	3,929	4,139	4,440	4,441	11,034	10,624	10,777		
15	4,515	6,045	4,106	3,424	4,071	4,460	4,760	10,715	10,813	10,455		
16	4,580	6,036	4,095	4,416	3,343	4,802	4,718	10,714	10,496	10,515		
17	4,463	5,274	4,147	4,367	2,808	3,804	5,704	11,052	10,702	10,470		
18	4,922	5,314	2,944	4,570	3,372	4,248	4,795	10,815	11,020	10,558		
19	4,872	5,412	2,366	4,122	3,319	4,934	6,667	9,991	10,916	10,678		
20	5,262	4,907	2,265	3,428	3,437	3,750	6,004	10,116	10,621	10,941		
21	5,150	4,343	2,745	2,901	3,480	3,554	6,377	10,233	9,944	12,408		
22	4,953	4,417	1,534	4,867	3,203	3,219	7,254	10,642	9,548	10,841		
23	5,082	4,855	1,502	3,933	3,535	3,476	7,000	12,312	10,982	10,607		
24	5,013	3,944	2,007	4,321	3,385	2,942	8,691	11,652	9,774	10,807		
25	4,649	4,179	2,224	3,495	3,835	3,602	9,066	10,705	10,621	11,008		
26	5,074	4,596	2,265	3,544	3,036	3,568	11,226	10,312	11,746	10,738		
27	4,985	3,871	2,313	3,707	3,804	3,776	9,651	9,591	11,031	10,806		
28	4,813	3,806	2,266	4,461	3,324	4,474	10,500	10,270	11,356	9,670		
29	4,874	2,771	2,131	3,830		5,782	10,170	10,226	11,939	9,546		
30	5,508	1,387	2,499	3,461		5,147	10,893	8,893	11,635	9,580		
31	5,498		2,434	4,059		5,008		9,177		9,212		
TOTAL	145,053	145,685	84,478	111,396	102,030	125,292	191,032	329,830	312,018	333,706		
MEAN	4,679	4,856	2,725	3,593	3,644	4,042	6,368	10,640	10,401	10,765		
MAX	5,508	6,045	4,699	5,621	4,491	5,782	11,226	12,312	11,939	12,408		
MIN	3,944	1,387	1,003	1,942	2,808	2,942	4,008	8,893	8,512	9,212		

WATER YEAR TOTALS

TOTAL	1,880,520
DAILY MEAN	6,186
DAILY MAX	12,408 07/21/2013
DAILY MIN	1,003 12/02/2012

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

RUN DATE: August 8, 2013

KESWICK DAM, RESERVOIR, AND POWERPLANT

QT

TOTAL RELEASE, CFS

WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7,008	6,506	4,719	4,665	4,565	3,676	5,634	10,555	11,686	14,094		
2	7,017	6,507	4,977	4,656	4,557	3,882	5,723	10,566	11,693	13,934		
3	7,007	6,509	4,888	4,572	4,453	3,904	5,790	10,563	11,681	14,171		
4	6,770	6,770	4,744	4,558	4,389	3,872	5,780	10,558	11,686	14,221		
5	6,746	6,491	4,738	4,563	4,487	3,890	5,793	10,566	11,678	13,853		
6	6,758	6,433	4,743	4,570	4,494	3,877	5,791	10,565	13,214	13,949		
7	6,754	6,057	4,754	4,579	4,575	3,871	5,782	12,204	13,507	14,018		
8	6,527	6,009	4,752	4,523	4,472	4,926	5,794	12,158	13,500	14,068		
9	6,501	6,024	4,616	4,438	4,315	5,121	5,795	12,108	13,492	13,716		
10	6,511	6,026	4,699	4,465	4,139	5,142	5,790	12,108	13,500	13,591		
11	6,516	6,006	4,568	4,572	4,172	5,115	5,794	12,100	13,487	13,498		
12	6,502	6,013	4,562	4,582	4,089	5,013	5,745	11,370	13,497	14,250		
13	6,499	6,127	4,550	4,574	4,000	5,099	5,389	11,383	13,491	14,250		
14	6,504	6,317	4,553	4,471	3,892	5,118	5,494	11,372	13,710	14,250		
15	6,502	6,092	4,575	4,455	3,893	5,036	5,539	11,415	13,719	13,413		
16	6,498	6,304	4,552	4,423	3,890	4,912	5,526	11,489	13,737	13,728		
17	6,512	6,322	4,552	4,406	3,887	4,778	5,522	11,352	13,732	13,618		
18	6,509	6,136	4,558	4,410	3,894	4,601	5,826	11,388	13,738	13,586		
19	6,753	5,927	4,569	4,443	3,903	4,562	6,244	11,404	13,756	13,429		
20	6,767	5,913	4,569	4,496	3,898	4,450	6,600	11,568	13,759	13,634		
21	6,768	5,740	4,367	4,541	3,898	4,257	6,617	12,713	13,757	13,750		
22	6,719	5,471	4,669	4,559	3,901	4,043	7,043	12,458	13,740	13,592		
23	6,757	5,255	4,733	4,551	3,900	4,035	8,044	12,463	13,756	13,663		
24	6,768	5,220	4,756	4,566	3,892	4,037	8,771	12,480	13,753	13,603		
25	6,760	5,213	4,756	4,542	3,905	4,047	9,985	12,492	14,224	13,594		
26	6,758	5,212	4,750	4,551	3,905	3,867	10,469	12,192	14,221	13,605		
27	6,753	5,117	4,728	4,571	3,917	3,760	10,524	12,251	13,976	13,612		
28	6,515	5,017	4,659	4,551	3,904	3,985	10,564	12,245	13,955	13,070		
29	6,513	4,919	4,671	4,567		5,675	10,548	12,213	14,149	12,750		
30	6,515	4,817	4,646	4,557		5,806	10,567	11,759	14,164	12,823		
31	6,509		4,669	4,553		5,806		11,777		12,775		
TOTAL	206,496	176,470	144,642	140,530	115,186	140,163	208,483	361,835	401,958	424,108		
MEAN	6,661	5,882	4,666	4,533	4,114	4,521	6,949	11,672	13,399	13,681		
MAX	7,017	6,770	4,977	4,665	4,575	5,806	10,567	12,713	14,224	14,250		
MIN	6,498	4,817	4,367	4,406	3,887	3,676	5,389	10,555	11,678	12,750		

WATER YEAR TOTALS

TOTAL	2,319,871
DAILY MEAN	7,631
DAILY MAX	14,250 07/12/2013
DAILY MIN	3,676 03/01/2013

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

RUN DATE: August 8, 2013

LEWISTON DAM, LAKE, AND JUDGE FRANCIS CARR POWERPLANT

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RELEASE TO RIVER, CFS

WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	457	310	315	292	296	309	271	2,840	1,354	452		
2	451	312	325	296	296	311	270	3,910	1,354	458		
3	455	310	319	294	295	308	270	4,305	1,376	454		
4	456	320	332	294	299	308	270	4,420	1,364	453		
5	456	311	335	294	298	310	299	4,258	1,253	454		
6	455	312	322	294	300	309	308	4,068	1,204	457		
7	456	314	323	296	295	311	307	3,819	1,143	455		
8	453	318	322	296	295	305	308	3,680	1,094	462		
9	458	306	322	292	298	301	300	3,470	1,064	469		
10	454	305	320	296	296	302	299	3,359	1,022	467		
11	453	308	301	294	297	299	300	3,203	938	462		
12	455	307	305	298	301	300	299	3,050	902	461		
13	458	305	312	294	297	289	299	2,901	729	463		
14	458	308	311	292	301	323	303	2,778	681	462		
15	448	309	312	295	306	321	303	2,674	677	459		
16	456	310	311	298	307	320	300	2,541	676	448		
17	399	314	311	296	308	316	296	2,463	675	439		
18	309	314	309	301	308	316	298	2,354	638	442		
19	302	310	312	302	308	318	298	2,235	578	446		
20	300	310	290	299	305	319	298	2,128	540	447		
21	298	314	291	295	306	320	684	1,984	539	411		
22	285	314	293	294	307	341	1,621	1,976	503	439		
23	273	310	295	296	307	320	2,043	1,982	488	438		
24	287	313	292	298	307	318	2,025	1,982	464	443		
25	292	313	294	297	308	320	2,026	1,964	452	447		
26	292	314	297	295	305	319	2,029	1,922	447	447		
27	291	313	295	293	304	320	1,991	1,923	446	450		
28	292	310	296	297	308	305	1,980	1,686	447	451		
29	290	313	292	297		284	1,993	1,520	451	451		
30	292	314	292	296		271	1,953	1,520	450	449		
31	293		292	296		273		1,521		445		
TOTAL	11,774	9,341	9,538	9,167	8,458	9,586	24,241	84,436	23,949	13,981		
MEAN	380	311	308	296	302	309	808	2,724	798	451		
MAX	458	320	335	302	308	341	2,043	4,420	1,376	469		
MIN	273	305	290	292	295	271	270	1,520	446	411		

WATER YEAR TOTALS

TOTAL	204,471
DAILY MEAN	673
DAILY MAX	4,420 05/04/2013
DAILY MIN	270 04/02/2013

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

RUN DATE: August 8, 2013

WHISKEYTOWN DAM, LAKE, AND SPRING CREEK POWERPLANT

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GENERATION RELEASE, CFS

WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1,625	385	1,659	1,987	154	80	80	80	2,338	3,100		
2	1,591	484	1,146	1,852	80	80	1,095	80	2,650	3,147		
3	1,624	412	1,783	1,865	80	80	80	80	2,287	3,154		
4	1,620	449	538	1,792	80	80	768	80	2,702	2,645		
5	1,673	81	1,883	821	456	80	80	80	2,503	3,095		
6	1,591	62	1,448	789	80	80	80	80	2,383	3,152		
7	1,588	40	1,443	725	80	214	80	80	2,276	2,815		
8	948	39	931	653	80	85	81	107	2,098	3,146		
9	972	39	654	718	80	80	80	80	2,641	3,248		
10	1,040	38	82	82	80	80	80	80	2,707	3,150		
11	1,000	38	82	81	80	80	80	80	2,824	2,494		
12	981	38	82	241	80	80	80	80	2,820	3,134		
13	976	38	81	81	80	80	80	80	2,793	3,149		
14	972	38	157	67	80	80	80	87	2,896	3,035		
15	978	38	82	136	80	80	80	80	2,709	3,140		
16	963	38	81	56	80	80	80	304	2,391	3,146		
17	748	38	72	56	80	80	80	81	3,049	3,132		
18	736	38	1,431	54	349	80	83	404	2,929	3,222		
19	711	38	1,662	44	80	80	89	857	2,656	3,167		
20	569	21	1,381	44	80	392	80	979	2,247	2,794		
21	644	709	1,607	700	80	80	80	1,592	3,585	1,176		
22	844	14	2,272	44	80	80	80	980	3,596	3,133		
23	815	14	2,041	44	80	80	87	488	2,437	3,154		
24	1,029	14	1,382	44	80	80	81	1,268	3,370	3,139		
25	1,151	14	1,389	58	83	80	80	2,013	3,364	2,968		
26	687	14	1,544	80	80	80	80	1,211	2,268	3,161		
27	644	14	1,709	80	80	80	80	1,971	2,900	3,183		
28	605	359	1,975	80	80	80	81	1,399	2,755	3,020		
29	563	686	1,911	86		84	80	2,267	3,091	3,155		
30	260	1,908	1,523	757		80	81	2,260	3,048	3,098		
31	278		1,739	80		80		2,217		3,122		
TOTAL	30,426	6,138	35,770	14,197	2,962	2,935	4,126	21,525	82,313	93,374		
MEAN	981	205	1,154	458	106	95	138	694	2,744	3,012		
MAX	1,673	1,908	2,272	1,987	456	392	1,095	2,267	3,596	3,248		
MIN	260	14	72	44	80	80	80	80	2,098	1,176		

WATER YEAR TOTALS

TOTAL	293,766
DAILY MEAN	966
DAILY MAX	3,596 06/22/2013
DAILY MIN	14 11/22/2012