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APR 17 2014

CVO-400
WTR-4.10

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 February, 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.

During February 2014, 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 February 2014, the average monthly water temperature was 50.1 °F at Balls Ferry.

Enclosed is the monitoring report for February 2014, 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
Keswick (R-3) “	Water Temperature, daily average, degrees F Turbidity, ntu, monthly

Station	Description
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
February 2014

Req. Sampling Frequency - Daily Average (Reading indicates daily average)							Control Pt 2/1 to 2/28			Req. Sampling Frequency - Monthly		
	Sta 2	Sta 3	Sta 4	Sta 5	Sta9		Sta 6	Sta 7	Sta 8			
Date	Shd	Kwk	Spp	Bsf	Lws		Dlt	Mss	** Pmn			
1	48.4	48.4	47.4	48.87	nr							
2	48.2	48.1	47.5	48.53	nr							
3	48.0	48.1	47.5	48.40	nr							
4	48.0	48.0	47.4	48.12	nr							
5	48.0	47.9	47.3	48.01	nr							
6	47.9	47.9	47.3	48.30	nr							
7	47.6	47.9	47.4	48.23	nr							
8	47.5	47.9	47.9	48.64	nr							
9	47.7	47.8	48.2	49.38	nr							
10	47.8	47.8	48.4	50.00	nr							
11	47.8	48.0	48.4	50.08	nr							
12	47.7	48.2	48.5	50.20	nr			45.0				
13	47.7	48.2	48.7	50.45	nr							
14	47.5	48.2	49.0	50.65	nr							
15	47.3	48.1	49.2	50.96	nr							
16	47.4	48.3	49.3	50.94	nr							
17	47.5	48.1	49.4	50.86	nr							
18	48.1	48.2	49.4	50.56	nr		45.8					
19	48.6	48.0	49.4	50.60	nr							
20	48.9	48.2	49.4	50.70	46.6							
21	49.0	48.7	49.5	50.64	47.0							
22	49.1	49.0	49.5	50.72	47.3							
23	49.1	49.2	49.4	50.83	47.5							
24	49.3	49.5	49.5	50.91	47.9							
25	49.3	49.7	49.7	51.16	48.1							
26	49.3	49.8	50.2	51.45	48.0							
27	49.1	49.9	50.9	51.65	48.4							
28	49.2	49.8	51.6	51.86	48.4							

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 2/28/2014

** Site visit not accomplished.

Cross Channel Gate Operation:
 February 1 Open at approximately 0935
 February 2-9 Open
 February 10 Closed at approximately 0958
 February 11-28 Closed

**Measurements taken by the Northern CA Area Office Personnel
February 2014**

TEMPERATURE			
Sampling Frequency Every two weeks May 1 through November 30.			
	Sample 1	Sample 2	Sample 3
	2/5/2014		
Lake Elev	Temperature	Temperature	Temperature
MSL	Degrees F	Degrees F	Degrees F
(400 Feet Upstream of Dam)			
	Time: 11:50	Time:	Time:
625	44.8		
650	44.8		
675	44.9		
700	45.0		
725	45.1		
750	45.2		
775	45.5		
800	46.2		
825	47.5		
850	48.6		
875	48.7		
900	48.7		
925	48.8		
950			
975			
1000			
1025			
1050			
Lake Surface	935.74' 48.9		

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
	2/5/2014		
Lake Elev	Turbidity	Turbidity	Turbidity
MSL	ntu	ntu	ntu
(400 Feet Upstream of Dam)			
	Time: 11:50	Time:	Time:
625	0.0		
650	0.1		
675	0.0		
700	0.1		
725	0.2		
750	0.1		
775	0.1		
800	0.1		
825	0.1		
850	0.2		
875	0.2		
900	0.2		
925	0.2		
950			
975			
1000			
1025			
1050			
Lake Surface	935.74' 0.3		

Central Valley Operations Office
 Measurements taken by the Northern CA Area Office Personnel

**Summary of Turbidity and Dissolved Oxygen Water Sampling
 February 2014**

Turbidity Measurements, NTU

Sampling Frequency

Monthly, except weekly from May 1 through September 30, when turbidity at Station 2 is equal to or greater than 10 NTU.

Station							
	R-2	R-3a	R-4	R-5	R-6	R-7	R-8
	Shasta Dam		Spring	Balls Ferry			
	Discharge	Keswick	Creek PP	Control Point	Sacramento	McCloud	Pit
Day	at Bridge	Discharge	Discharge	2/1 to 2/28	River (DLT)	River	River
4	0.8						
6			1.6				
12				3.2		1.1	
18		1.3			0.7		

Dissolved Oxygen, mg/l

Sampling Frequency

Every two weeks from May 1 through September 30; samples to be taken before 1000 hours.

Station				
	R-2	R-3	R-5	
	Shasta Dam		Control Point	Hour
	Discharge	Keswick	2/1 to 2/28	Time Sample
Day	at Bridge	Discharge	Balls Ferry	Taken
	No Requirement October through April.			

Temperature 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 2/28/2014.

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

RUN DATE: March 7, 2014

SHASTA LAKE, DAM AND POWERPLANT

QG

GENERATION RELEASE, CFS

WATER YEAR OCTOBER 2013 TO SEPTEMBER2014

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5,649	6,198	3,315	3,087	3,350							
2	5,514	5,264	3,424	3,230	3,261							
3	5,223	4,608	3,402	3,086	3,354							
4	5,533	4,848	3,346	3,344	2,944							
5	5,227	4,431	3,182	2,641	3,144							
6	5,255	4,615	3,634	2,837	3,312							
7	5,505	4,309	3,239	2,603	3,238							
8	5,572	4,122	3,032	2,759	3,774							
9	6,048	3,788	3,362	2,777	3,779							
10	5,630	4,109	3,027	3,117	4,079							
11	5,380	3,843	3,061	3,138	3,415							
12	5,869	3,813	3,083	3,048	3,496							
13	5,370	4,238	3,195	2,745	3,152							
14	5,483	4,196	3,117	2,729	2,864							
15	5,659	3,796	3,008	2,681	2,595							
16	5,747	3,741	3,190	2,893	2,466							
17	5,431	3,233	3,065	2,914	2,691							
18	5,611	3,139	3,033	2,820	2,492							
19	5,208	2,998	3,223	2,795	3,762							
20	4,947	3,185	3,469	2,671	2,322							
21	5,443	3,065	3,209	2,804	2,467							
22	5,172	3,016	3,170	2,894	2,569							
23	5,530	3,081	3,692	2,802	2,678							
24	5,207	3,233	3,393	3,078	2,714							
25	4,968	3,412	3,198	2,714	2,794							
26	4,879	3,381	3,271	2,506	3,061							
27	4,982	3,240	3,363	3,040	2,132							
28	4,855	3,264	3,325	3,332	2,336							
29	4,560	3,246	3,031	3,162								
30	4,961	3,288	3,187	2,999								
31	5,015		2,941	3,343								
TOTAL	165,433	114,700	100,187	90,189	84,628							
MEAN	5,337	3,823	3,232	2,909	3,022							
MAX	6,048	6,198	3,692	3,343	4,079							
MIN	4,560	2,998	2,941	2,506	2,132							

WATER YEAR TOTALS

TOTAL	555,137	
DAILY MEAN	3,676	
DAILY MAX	6,198	11/01/2013
DAILY MIN	2,132	02/27/2014

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

RUN DATE: March 7, 2014

KESWICK DAM, RESERVOIR, AND POWERPLANT

QT

TOTAL RELEASE, CFS

WATER YEAR OCTOBER 2013 TO SEPTEMBER 2014

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6,250	5,658	3,891	3,779	3,349							
2	6,244	5,536	3,996	3,630	3,350							
3	6,251	5,146	4,068	3,562	3,340							
4	6,252	5,195	4,066	3,280	3,307							
5	6,247	4,924	4,064	3,107	3,275							
6	6,239	4,786	4,067	3,102	3,258							
7	6,239	4,628	4,057	3,098	3,411							
8	6,219	4,583	3,967	3,047	3,709							
9	6,149	4,722	3,974	2,955	3,453							
10	6,169	4,665	3,986	3,042	3,469							
11	6,154	4,618	4,047	3,002	3,312							
12	6,088	4,478	3,990	2,975	3,174							
13	6,168	4,420	3,993	2,979	3,075							
14	6,140	4,158	3,995	2,952	2,994							
15	6,111	3,920	3,991	2,895	2,890							
16	6,111	3,848	3,992	2,887	2,890							
17	6,135	3,792	3,990	2,888	2,889							
18	6,112	3,962	3,993	2,892	2,894							
19	6,117	3,998	3,925	2,898	2,932							
20	6,104	3,985	3,834	2,893	2,897							
21	6,004	4,006	3,844	2,895	2,751							
22	5,950	4,006	3,843	2,894	2,773							
23	5,943	3,965	3,838	2,898	2,731							
24	5,950	3,909	3,858	2,882	2,708							
25	5,957	3,913	3,885	2,846	2,712							
26	5,904	3,960	3,821	2,842	2,710							
27	5,877	4,039	3,787	3,082	2,618							
28	5,879	4,033	3,794	3,352	2,688							
29	5,894	4,047	3,651	3,349								
30	5,878	3,983	3,628	3,343								
31	5,883		3,794	3,348								
TOTAL	188,618	130,883	121,629	95,594	85,559							
MEAN	6,084	4,363	3,924	3,084	3,056							
MAX	6,252	5,658	4,068	3,779	3,709							
MIN	5,877	3,792	3,628	2,842	2,618							

WATER YEAR TOTALS

TOTAL	622,283	
DAILY MEAN	4,121	
DAILY MAX	6,252	10/04/2013
DAILY MIN	2,618	02/27/2014

UNITED STATES DEPARTMENT OF THE INTERIOR
 U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA
LEWISTON DAM, LAKE, AND JUDGE FRANCIS CARR POWERPLANT

RUN DATE: March 7, 2014

QR **RELEASE TO RIVER, CFS**

WATER YEAR OCTOBER 2013 TO SEPTEMBER 2014

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	466	305	314	314	304							
2	466	305	312	315	306							
3	463	293	313	316	307							
4	462	302	315	316	307							
5	461	304	312	317	306							
6	463	303	314	317	306							
7	459	303	312	315	306							
8	461	308	313	318	308							
9	463	309	317	317	308							
10	464	308	318	318	302							
11	461	309	313	318	305							
12	458	310	312	320	306							
13	461	311	315	321	306							
14	447	312	315	320	305							
15	402	311	314	312	306							
16	347	311	312	312	306							
17	312	312	310	310	309							
18	308	313	312	313	305							
19	306	316	315	315	298							
20	307	313	318	313	296							
21	306	310	315	312	304							
22	307	310	316	312	316							
23	308	311	312	313	314							
24	303	315	314	313	313							
25	300	314	312	315	313							
26	299	314	313	312	313							
27	298	314	314	323	308							
28	301	314	314	298	308							
29	299	315	312	304								
30	302	312	312	305								
31	305		312	305								
TOTAL	11,765	9,287	9,722	9,729	8,591							
MEAN	380	310	314	314	307							
MAX	466	316	318	323	316							
MIN	298	293	310	298	296							

WATER YEAR TOTALS

TOTAL	49,094
DAILY MEAN	325
DAILY MAX	466 10/01/2013
DAILY MIN	293 11/03/2013

UNITED STATES DEPARTMENT OF THE INTERIOR
 U.S. BUREAU OF RECLAMATION-CENTRAL VALLEY PROJECT-CALIFORNIA
WHISKEYTOWN DAM, LAKE, AND SPRING CREEK POWERPLANT

RUN DATE: March 7, 2014

QG **GENERATION RELEASE, CFS**

WATER YEAR OCTOBER 2013 TO SEPTEMBER2014

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	638	83	109	76	14							
2	794	586	85	74	14							
3	798	565	81	74	14							
4	728	606	80	74	14							
5	722	622	80	75	14							
6	665	447	80	73	14							
7	641	724	80	73	14							
8	799	740	80	73	14							
9	380	575	80	73	14							
10	738	111	80	73	14							
11	721	107	80	73	14							
12	750	125	78	73	14							
13	768	88	78	74	14							
14	750	115	78	74	14							
15	660	128	78	57	14							
16	725	202	77	14	14							
17	692	90	77	14	14							
18	736	115	77	14	14							
19	939	214	77	14	14							
20	1,017	119	77	14	14							
21	1,030	128	77	14	14							
22	954	121	77	14	14							
23	946	189	77	14	14							
24	953	167	77	14	14							
25	1,320	120	77	14	14							
26	1,283	100	77	14	14							
27	1,280	118	77	14	14							
28	1,595	101	77	14	14							
29	1,726	89	77	14								
30	1,150	175	77	14								
31	1,304		77	14								
TOTAL	28,202	7,670	2,459	1,313	392							
MEAN	910	256	79	42	14							
MAX	1,726	740	109	76	14							
MIN	380	83	77	14	14							

WATER YEAR TOTALS

TOTAL	40,036	
DAILY MEAN	265	
DAILY MAX	1,726	10/29/2013
DAILY MIN	14	01/16/2014