

**AGENDA**  
**Stanislaus Operations Group**  
**September 19, 2012**  
**Central Valley Operations Office**  
**3310 El Camino Avenue, Room 302, Sacramento, CA 95821**  
**1:00 PM to 3:00 PM**  
**Telecon Number 1-866-7578460**  
**Participant Code #9068008**

**RPA Action**

**Agenda Items**

**Announcements**

**Stanislaus Operations Summary & Expected Operations**

Action III.1.3      Flow Criterion

Action III.1.2      Temperature Criterion

**Fishery and Restoration Updates**

Action III.2.2      Floodplain Restoration

Action II.2.1.3      Fish Monitoring and Reporting

Action III.2.3      Restoration Update

Honolulu Restoration: <http://www.oakdaleleader.com/section/44/article/8527/>

Salmon Habitat Improved: <http://www.modbee.com/2012/09/16/2376518/stanislaus-salmon-habitat-improved.html>

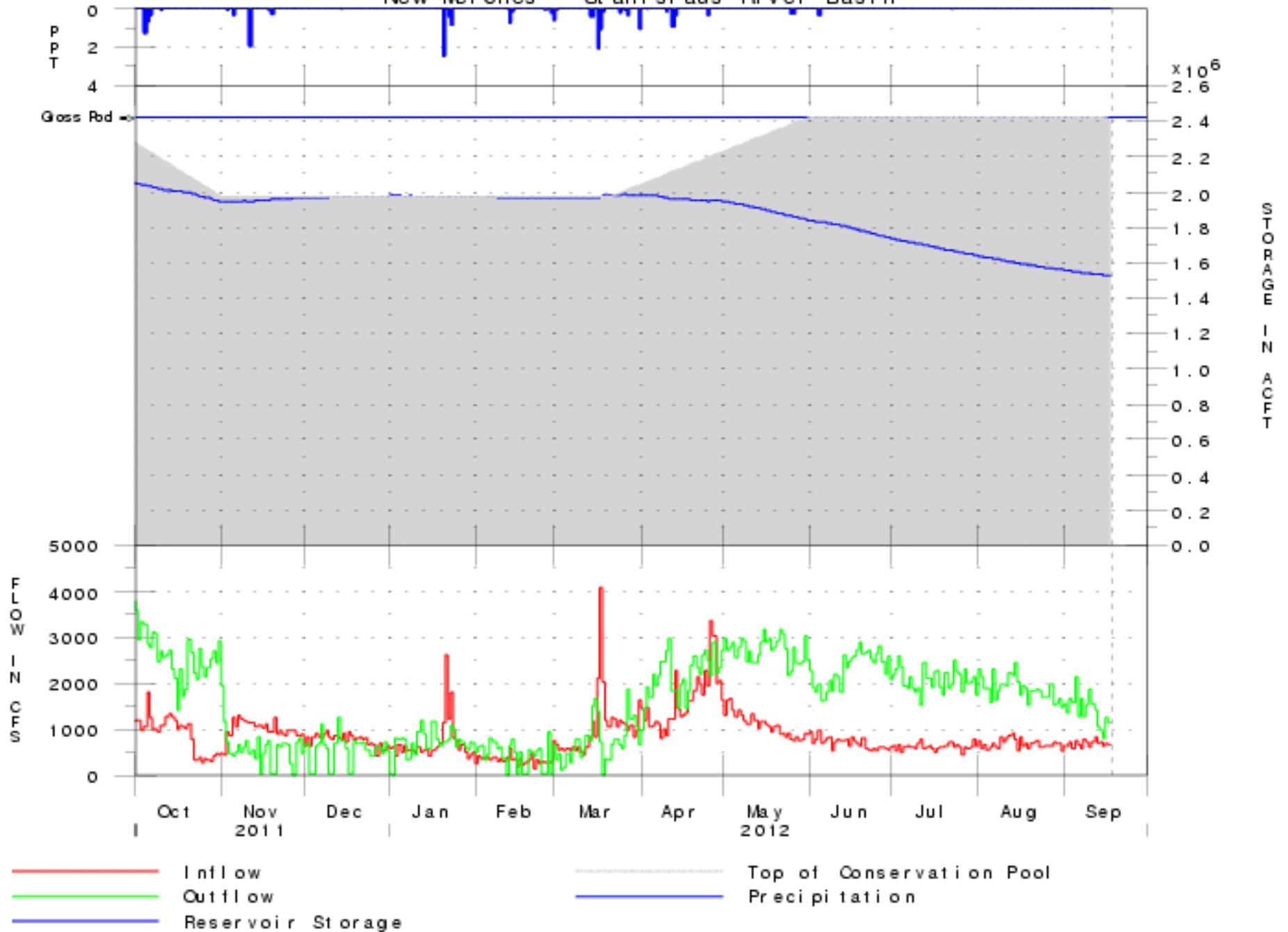
**Other Items to discuss**

**NMFS OCAP Biological Opinion: Reasonable and Prudent Alternatives (RPAs)  
References**

<b>ACTION ID</b>	<b>PAGE #</b>	<b>RPA NAME</b>
Section 11.2.1.2	583	Research and Adaptive Management (Annual Review)
Section 11.2.1.3	584	Monitoring and Reporting: (e) Adult escapement and juvenile monitoring for steelhead on the Stanislaus River
Action III.1.1	581-583,620	Establish Stanislaus Operational Group (SOG) for Real-Time Operational Decision-Making
Action III.1.2	620-621	Provide Cold Water Releases to Maintain Suitable Steelhead Temperatures.
Action III.1.3	622-625, Appendix 2-E	Operate the East Side Division Dams to Meet the Minimum Flows, as Measured at Goodwin Dam.
Action III.2.1	626	Increase and Improve Quality of Spawning Habitat with addition of 50,000 Cubic Yards of Gravel by 2014 and with a Minimum Addition of 8,000 Cubic Yards per Year for the Duration of the Project Actions.
Action III.2.2	627	Conduct Floodplain Restoration and Inundation in Winter or Spring to Inundate Steelhead Juvenile Rearing Habitat on One- to Three- Year Schedule.
Action III.2.3	627	Restore Freshwater Migratory Habitat for Juvenile Steelhead by Implementing Projects to Increase Floodplain Connectivity and to Reduce Predation Risk During Migration.
Action III.2.4	628	Evaluate Fish Passage at New Melones, Tulloch, and Goodwin Dams
Action IV.2.1	641	Phase II: Interim Operations in 2011-2012: Reclamation shall increase its releases at Goodwin Reservoir, if necessary, in order to meet the flows required at Vernalis

18SEP12 08:55:04

### New Melones - Stanislaus River Basin



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

SEPTEMBER 2012

**NEW MELONES LAKE DAILY OPERATIONS**

RUN DATE: September 18, 2012

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	
		1,556.4								
1	1,008.91	1,554.4	-2.0	647	1,545	0	0	108	.35	.00
2	1,008.74	1,552.8	-1.6	632	1,368	0	0	77	.25	.00
3	1,008.52	1,550.7	-2.1	726	1,674	0	0	104	.34	.00
4	1,008.29	1,548.5	-2.2	583	1,576	0	0	107	.35	.00
5	1,007.97	1,545.5	-3.0	757	2,136	0	0	150	.49	.00
6	1,007.82	1,544.1	-1.4	661	1,284	0	0	92	.30	.00
7	1,007.58	1,541.8	-2.3	582	1,661	0	0	64	.21	.00
8	1,007.44	1,540.5	-1.3	770	1,286	0	0	150	.49	.00
9	1,007.25	1,538.7	-1.8	719	1,520	0	0	104	.34	.00
10	1,006.97	1,536.0	-2.6	612	1,853	0	0	92	.30	.00
11	1,006.45	1,531.1	-4.9	-826	1,542	0	0	100	.33	.00
12	1,006.30	1,529.7	-1.4	822	1,427	0	0	107	.35	.00
13	1,006.20	1,528.8	-0.9	695	1,066	0	0	103	.34	.00
14	1,006.12	1,528.0	-0.8	716	962	0	0	134	.44	.00
15	1,006.06	1,527.5	-0.6	631	819	0	0	97	.32	.00
16	1,005.92	1,526.2	-1.3	706	1,257	0	0	112	.37	.00
17	1,005.80	1,525.0	-1.1	668	1,133	0	0	103	.34	.00
<b>TOTALS</b>			<b>-31.3</b>	<b>10,101</b>	<b>24,109</b>	<b>0</b>	<b>0</b>	<b>1,804</b>	<b>5.91</b>	<b>.00</b>
<b>ACRE-FEET</b>			<b>-31,300</b>	<b>20,035</b>	<b>47,820</b>	<b>0</b>	<b>0</b>	<b>3,578</b>		

COMMENTS:

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

**SUMMARY**

	RELEASE (ACRE-FEET)			PRECIPITATION	
POWER	47,820	OUTLET	0	THIS MONTH =	.00
SPILL	0	TOTAL	47,820	JULY 1, 2012 TO DATE =	.10

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

**SEPTEMBER 2012**

**TULLOCH RESERVOIR DAILY OPERATIONS**

RUN DATE: 09/18/2012

DAY	ELEV	STORAGE ACRE-FEET RES.	CHANGE	COMPUTED* INFLOW C.F.S.	NEW MELONES RELEASE	POWER	RELEASE - C.F.S. SPILL	OUTLET	EVAP C.F.S. (1)
		65,301							
1	508.52	65,129	-172	1,547	1,545	1,620	0	0	14
2	508.04	64,538	-591	1,356	1,368	1,644	0	0	10
3	508.10	64,612	+74	1,665	1,674	1,615	0	0	13
4	507.98	64,465	-147	1,567	1,576	1,627	0	0	14
5	508.84	65,523	+1,058	2,158	2,136	1,605	0	0	20
6	508.38	64,957	-566	1,290	1,284	1,563	0	0	12
7	508.54	65,154	+197	1,642	1,661	1,535	0	0	8
8	508.13	64,649	-505	1,294	1,286	1,530	0	0	19
9	508.03	64,526	-123	1,489	1,520	1,538	0	0	13
10	508.66	65,301	+775	1,858	1,853	1,455	0	0	12
11	509.05	65,782	+481	1,555	1,542	1,299	0	0	13
12	509.27	66,057	+275	1,429	1,427	1,276	0	0	14
13	508.94	65,646	-411	1,063	1,066	1,256	0	0	14
14	508.45	65,043	-603	966	962	1,252	0	0	18
15	507.67	64,089	-954	800	819	1,268	0	0	13
16	507.43	63,798	-291	1,259	1,257	1,392	0	0	14
17	506.79	63,026	-772	1,118	1,133	1,494	0	0	13
<b>TOTALS</b>			<b>-2,275</b>	<b>24,056</b>	<b>24,109</b>	<b>24,969</b>	<b>0</b>	<b>0</b>	<b>234</b>
<b>ACRE-FEET</b>			<b>-2,275</b>	<b>47,715</b>	<b>47,820</b>	<b>49,526</b>	<b>0</b>	<b>0</b>	<b>464</b>

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

**SUMMARY  
RELEASE (ACRE-FEET)**

POWER	49,526	OUTLET	0
SPILL	0	TOTAL	49,526

# GOODWIN DAM ( GDW )

Date from 05/21/2012 08:00 through 09/18/2012 08:00 Duration : 120 days

Max of period : (05/23/2012 00:00, 1525.0) Min of period: (08/27/2012 00:00, 251.0)



DISCHARGE, SPILLWAY - CFS (9183)

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

SEPTEMBER 2012

GOODWIN RESERVOIR DAILY OPERATIONS

RUN DATE: September 18, 2012

DAY	ELEV	STORAGE		TULLOCH	RIVER		RELEASE - C.F.S.	
		ACRE-FEET	CHANGE		RELEASE	OUTLET	SPILL	JOINT MAIN
		531						
1	359.92	531	+0	1,620	0	252	886	379
2	359.92	531	+0	1,644	0	254	904	386
3	359.92	531	+0	1,615	0	255	851	401
4	359.92	531	+0	1,627	0	256	844	413
5	359.92	531	+0	1,605	0	253	820	429
6	359.92	531	+0	1,563	0	252	791	429
7	359.54	505	-26	1,535	0	256	767	440
8	359.92	531	+26	1,530	0	253	792	411
9	359.89	529	-2	1,538	0	252	823	372
10	359.89	529	+0	1,455	0	251	746	347
11	359.89	529	+0	1,299	0	258	593	347
12	359.92	531	+2	1,276	0	256	594	341
13	359.92	531	+0	1,256	0	257	594	317
14	359.92	531	+0	1,252	0	253	565	341
15	359.89	529	-2	1,268	0	254	596	344
16	359.92	531	+2	1,392	0	254	728	336
17	359.89	529	-2	1,494	0	253	806	361
<b>TOTALS</b>			<b>-2</b>	<b>24,969</b>	<b>0</b>	<b>4,319</b>	<b>12,700</b>	<b>6,394</b>
<b>ACRE-FEET</b>			<b>-2</b>	<b>49,526</b>	<b>0</b>	<b>8,567</b>	<b>25,190</b>	<b>12,682</b>

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

**SUMMARY**  
 RELEASE (ACRE-FEET)

JOINT MAIN CANAL	25,190	OUTLET	0
SOUTH MAIN CANAL	12,682	SPILL	8,567
		TOTAL	46,439

# STANISLAUS R AT ORANGE BLOSSOM BRIDGE -- OBB

## Sep-12

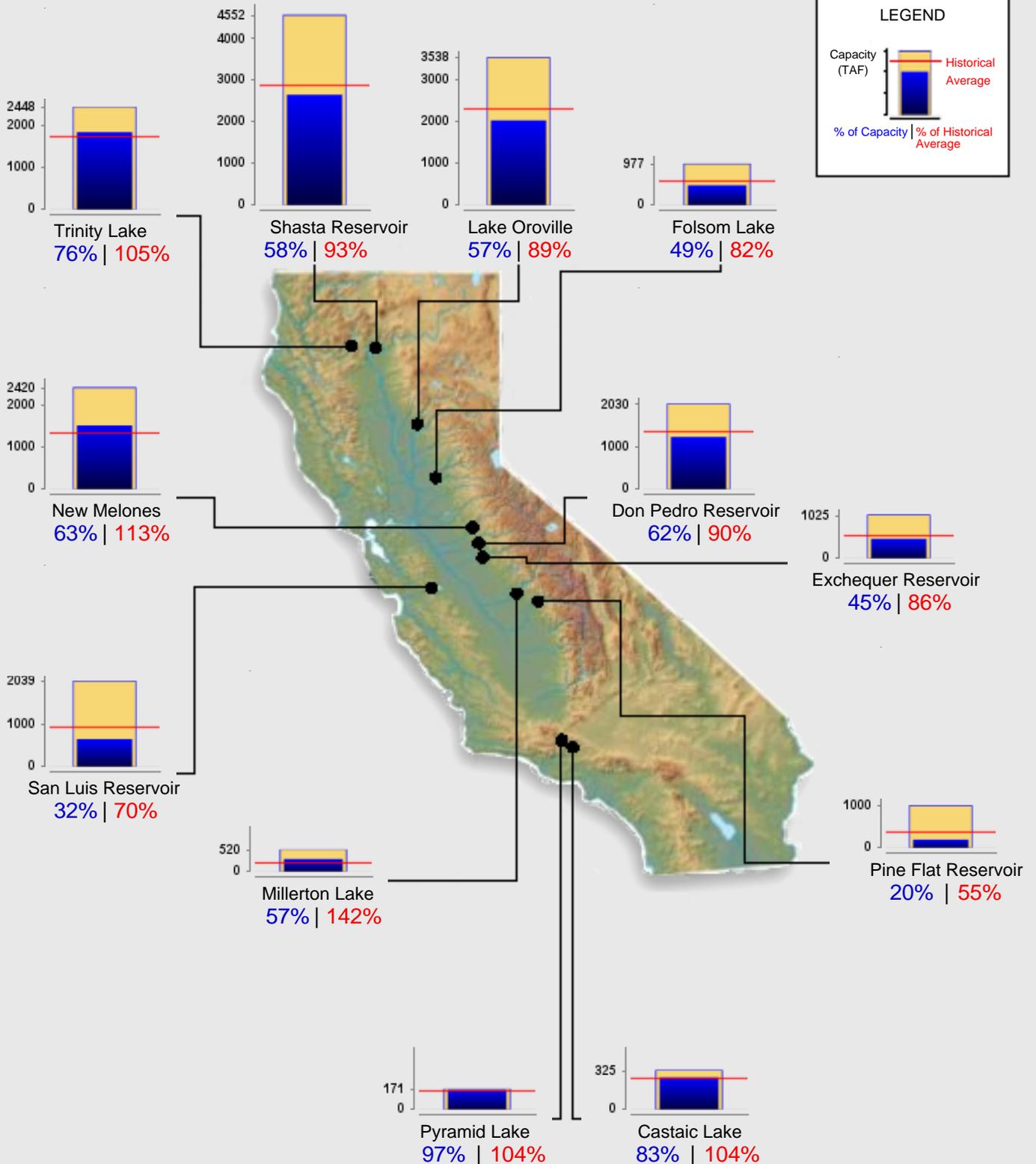
Date	RIVER STAGE (FEET)				FLOW, RIVER DISCHARGE (CFS)				TEMPERATURE, WATER (DEG F)				ELECTRICAL CONDUCTIVITY MICRO S (uS/cm)			
	MM/DD/YYYY	HRS	MAX	Min	MEAN	HRS	MAX	Min	MEAN	HRS	MAX	Min	MEAN	HRS	MAX	Min
9/1/2012	24	2.6	2.5	2.5	24	242	226	231	24	62.3	57.8	60.3	24	68	65	66.7
9/2/2012	24	2.6	2.5	2.5	24	240	218	231	24	62.5	57.7	60.3	24	73	64	69.3
9/3/2012	24	2.6	2.5	2.5	24	240	223	233	24	63.1	57.9	60.6	24	67	64	65.6
9/4/2012	24	2.6	2.5	2.5	24	234	221	229	24	63	58.2	60.9	24	68	64	65.8
9/5/2012	24	2.6	2.5	2.5	24	240	223	232	24	62.5	59	61.1	24	71	65	68.5
9/6/2012	24	2.6	2.5	2.5	24	234	223	227	24	62.3	59.1	60.8	24	70	67	68.8
9/7/2012	24	2.6	2.5	2.5	24	240	221	231	24	62.7	58.4	60.7	24	68	66	67
9/8/2012	24	2.6	2.5	2.5	24	240	223	232	24	62.7	58.6	60.9	24	69	63	67.2
9/9/2012	24	2.6	2.5	2.5	24	242	226	232	24	62.5	58.4	60.7	24	68	64	65.7
9/10/2012	24	2.6	2.5	2.5	24	234	226	229	24	62.5	58	60.4	24	68	66	67
9/11/2012	24	2.6	2.5	2.5	24	265	221	245	24	62.4	57.9	60.4	24	69	67	68.5
9/12/2012	24	2.5	2.5	2.5	24	259	248	253	24	62.6	58.4	60.7	24	69	67	67.7
9/13/2012	24	2.6	2.5	2.5	24	268	251	258	24	62.7	58.7	60.9	24	69	67	68.2
9/14/2012	24	2.5	2.5	2.5	24	262	245	254	24	62.9	59	61.1	24	69	67	67.9
9/15/2012	24	2.6	2.5	2.5	24	265	253	258	24	62.7	59	61.1	24	69	67	68.2
9/16/2012	24	2.5	2.5	2.5	24	262	251	255	24	62.1	58.5	60.6	24	69	67	67.9
9/17/2012	24	2.6	2.5	2.5	24	265	245	251	24	62.2	58.3	60.4	24	69	67	68.5
<b>Average for month</b>				<b>2.5</b>				<b>240</b>				<b>60.7</b>				<b>67.6</b>



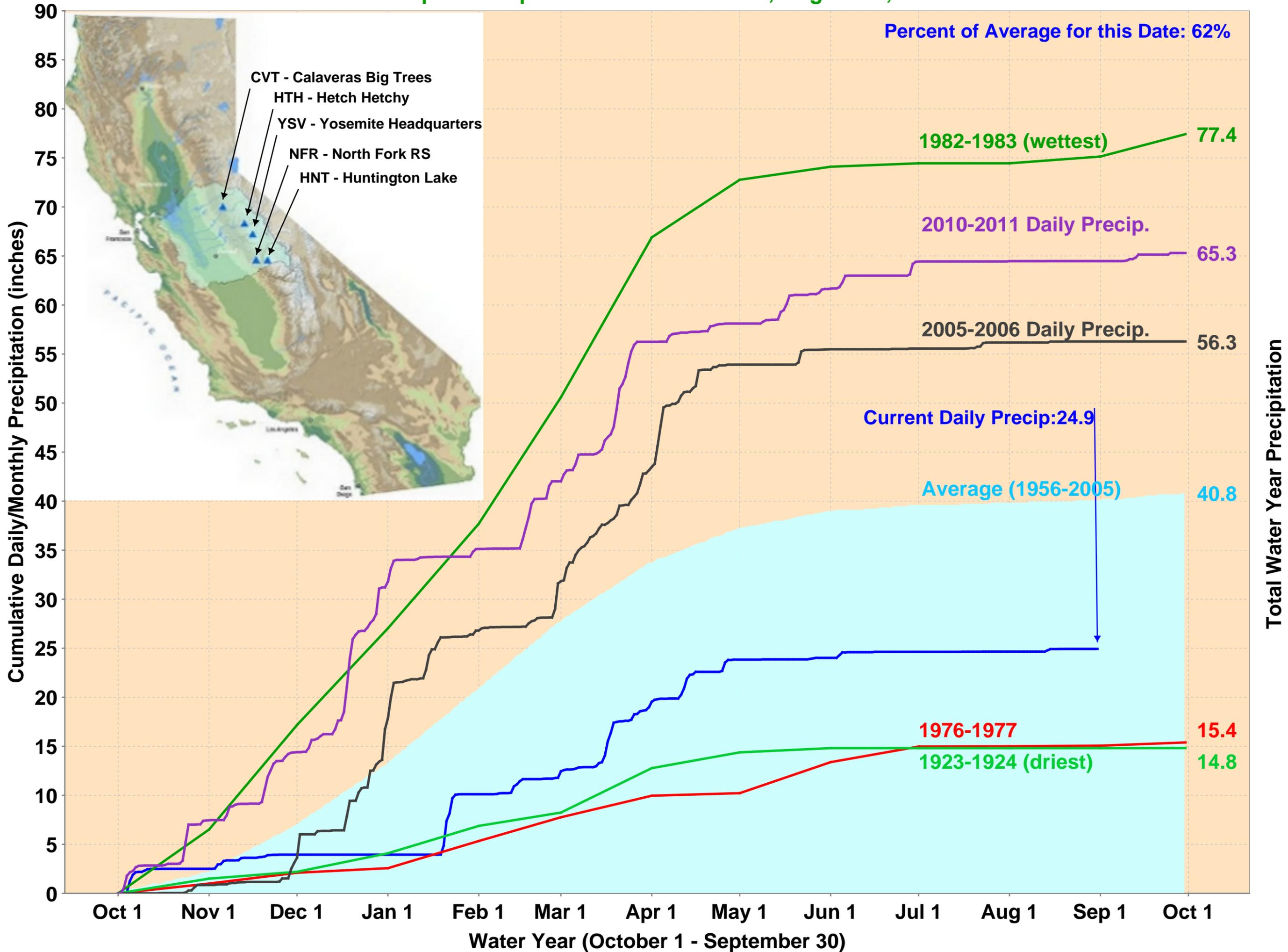
# Reservoir Conditions

Ending At Midnight - September 17, 2012

## CURRENT RESERVOIR CONDITIONS



# San Joaquin Precipitation: 5-Station Index, August 31, 2012



**Stanislaus Operations Group**  
**September 19, 2012**  
**Central Valley Operations Office**  
**3310 El Camino Avenue, Room 302, Sacramento, CA 95821**  
**1:00 PM to 3:00 PM**  
**Meeting Notes**

**Attendees:** Patti Clinton, Rachel Barnett-Johnson, and Tom Morstein-Marx - Reclamation; Barb Byrne and Monica Gutierrez (phone) – NMFS; J.D. Wikert and Craig Anderson - FWS; Tim Heyne and Pat Brantley (phone) – DFG; James Edwards and Dan Yamanaka- DWR

**Handouts**

Agenda

NMFS OCAP Biological Opinion: Reasonable and Prudent Alternatives (RPAs)

New Melones Lake Daily Operations, Run date: September 18, 2012

USACE New Melones – Stanislaus River Basin: September 18, 2012

Tulloch Reservoir Daily Operations, Run date: September 18, 2012

Goodwin Reservoir Daily Operations, Run date: September 18, 2012

Goodwin Dam Discharge, Run date: September 18, 2012

Stanislaus R at Orange Blossom Bridge – OBB: September 2012

San Joaquin Precipitation: August 31, 2012

Current Reservoir Conditions: September 17, 2012

Stanislaus River Weir 2012

Flow, River Discharge for: Mokelumne River at Woodbridge, Delta Cross Channel, BTW Sac R & Snodgras, North Mokelumne R at W Walnut Grove Rd, and Mokelumne R at San Joaquin River (10/01/2011 through 10/31/2011)

NMFS' 2012 Draft Release Schedule for Stanislaus, Tuolumne, and Merced (10/1/12 through 11/12/12)

FWS' San Joaquin Tributary Schedules – fall 2012

**Links to NMFS Biological Opinion (BiOp) and 2011 RPA Amendments**

BiOp:

[http://swr.nmfs.noaa.gov/ocap/NMFS\\_Biological\\_and\\_Conference\\_Opinion\\_on\\_the\\_Long-Term\\_Operations\\_of\\_the\\_CVP\\_and\\_SWP.pdf](http://swr.nmfs.noaa.gov/ocap/NMFS_Biological_and_Conference_Opinion_on_the_Long-Term_Operations_of_the_CVP_and_SWP.pdf)

2011 RPA Amendments:

[http://swr.nmfs.noaa.gov/ocap/040711\\_OCAP\\_opinion\\_2011\\_amendments.pdf](http://swr.nmfs.noaa.gov/ocap/040711_OCAP_opinion_2011_amendments.pdf)

**Announcement**

Reminder about the Stanislaus Salmon Festival on Saturday, 11/3 in Knights Ferry.

Next Friday, September 28, is the Open House for the new FWS office in Lodi

**RPA Action**

**Agenda Items**

**Stanislaus Operations Summary & Expected Operations**

### **Action III.1.3 - Flow Criterion**

Reclamation reported that Goodwin Dam releases have been fairly steady through August and September, ranging from 300 cfs in early August to 250 cfs from late August to the present. NOAA App 2-E releases currently control the operations. .

### **Action III.1.2 - Temperature Criterion**

Orange Blossom Bridge temperatures are currently below the 65° F criterion and dropping slightly. However, meeting the 56° F criterion during October may be problematic.

The group discussed the Orange Blossom Bridge temperature criteria for October 1; NMFS reminded the group that RPA Action III.1.2 explicitly includes some flexibility in the October 1 compliance start date (see page 47 of the 2011 RPA Amendments). Consideration of the shift in the initiation date of the temperature criterion led to a discussion about reshaping the fall attraction flow in Appendix 2-E (another flexibility in the RPA, Action III.1.3 on page 49); the discussion of both issues is summarized below.

Considerations for when to initiate the fall temperature criterion: If there are ripe adults in the river you want to provide temperatures that maintain egg viability but, if there are few adults, it may be appropriate to initiate the temperature criterion later in October. Water temperature will be affected by air temperatures as well as reservoir releases. Recent data from the Stanislaus weir reported that the year-to-date (sampling began 9/11/12) net upstream passage of Chinook adults was on the order of 30 individuals, with no steelhead yet observed. Given the limited number of adult Chinook observed passing the weir, and no reports of steelhead yet passing the weir, SOG agreed to advise that the fall temperature criterion of 56° F at Orange Blossom Bridge be deferred to the start of the fall pulse flow.

The current water year type according to the New Melones water supply parameter is “below normal”. The fall attraction flow per the “below normal” Appendix 2-E flow schedule is a steady flow of 1,500 cfs through the second half of October, after which minimum flows decrease to 200 cfs. The attraction flow needs to be managed, to the extent possible, to discourage salmonids from spawning in areas that would later be dewatered and in coordination with releases from other tributaries. In addition to dewatering concerns, SOG discussed the potential for some pulse reshaping to improve and sustain suitable temperatures before and after the main attraction flow, and discussed how “stacking” vs. “sequencing” releases from the different San Joaquin tributaries might have trade-offs for conditions at Vernalis. In general, the tradeoff was felt to be that “stacking” flows from multiple tributaries would provide better conditions, but for a shorter time and that “sequencing” flows from the individual tributaries would provide lesser improvements in conditions at Vernalis but would for a longer duration.

The group discussed reshaping the Stanislaus pulse to have multiple spikes over a slightly longer pulse duration. NMFS confirmed that the RPA allowed SOG to advise a variation on the Appendix 2-E flows as long as the intent of the Appendix 2-E flows was met; the advised flow could be implemented upon NMFS concurrence with the SOG advice (see discussion of this flexibility in RPA Action III.1.3 on p. 50 of the 2011 RPA amendments).

It was recommended that a smaller group (NMFS, FWS, DFG, and Reclamation) convene to draft a reshaped flow schedule and list the various considerations discussed by SOG at today's meeting. The group will meet next week to come up with a plan to provide to SOG for review and input. Reclamation would then provide the SOG advice to NMFS for approval. NMFS would provide information to WOMT.

*[The SOG Advice, appended to this meeting summary, provides an overview of the many factors considered both during this meeting and in e-mail discussion, regarding reshaping of the fall attraction flow.]*

Reclamation asked how the outcome of this modified pulse schedule could be measured. It was suggested that coordination with DFG during carcass survey could provide at least anecdotal information about the approximate elevation of the shallowest redds per survey section. Reclamation will coordinate with DFG.

## **Fishery and Restoration Updates**

### **Action III.2.1 - Gravel Addition**

Honolulu Bar – This restoration project included placement of 12,500 cubic yards of gravel (locally sourced).

### **Action III.2.2 - Floodplain Restoration**

Honolulu Bar – This restoration project is just about done. The riffle in the mainstem above the project was initially diverting too much water into the side-channel/floodplain at 250 cfs. This has been corrected by moving gravel into the head of the side-channel so the flow split works correctly. The side channel is flowing with appropriate depths and velocities.

Button Bush – This project, upstream and across the river from the Lancaster Road side channel restoration site, is moving forward. FWS met recently with the Corps to look at the site and coordinate efforts. Design work will occur sometime this fiscal year.

### **Action II.2.1.3 - Fish Monitoring and Reporting**

Preliminary results from the radio tracking study in the spring of 2012 show that survival of tagged juvenile *O. mykiss* is only 7% between Oakdale and Caswell. FWS will repeat the study next year at different flows, and could use volunteers.

The weir is in.

Stanislaus carcass survey is to start in the next couple of weeks.

## **Other**

**Annual Report:** The draft annual report has been turned in for management review. Review panel convenes 10/31/12. The agenda is still being developed.

Potential brown-bag presentations to SOG prior to SOG meetings:

Ripon D.O. Study – FISHBIO

NMFS invited FISHBIO to speak but no date has yet been arranged.

Next Meeting: October 17, 2012, 1:00 – 3:00 p.m.  
Central Valley Operations Office  
3310 El Camino Avenue, Room 302, Sacramento, CA 95821

Notes by Patti Clinton, Barb Byrne, and Tom Morstein-Marx