

Delta Operations for Salmonids and Sturgeon (DOSS) Group

Conference call: 11/29/11 at 9:00 a.m.

Objective: Provide advice to the Water Operations Management Team (WOMT) and National Marine Fisheries Service (NMFS) on measures to reduce adverse effects from Delta operations of the Central Valley Project and the State Water Project on salmonids and green sturgeon.

DOSS will coordinate the work of other technical teams. DOSS notes and advice can be found at: <http://www.swr.noaa.gov/ocap/doss.htm>

DWR: Angela Llaban, Mike Ford, Edmund Yu, James Gleim, Kevin Reece, Andy Chu

FWS: Leigh Bartoo, Craig Anderson, Roger Guinee

NMFS: Barb Byrne, Barbara Rocco, Jeff Stuart

Reclamation: Josh Israel, Russ Yaworsky

DFG: Robert Vincik, Bob Fujimura

EPA, SWRCB: not present

Reminder: Please send any revisions and comments to both Bruce Oppenheim (or Barb Byrne in Bruce's absence) and Barbara Rocco.

Agenda

1. Fish monitoring
2. Current operations
3. Check on DCC ops
4. Spring-run surrogate release timing from Coleman National Fish Hatchery (CNFH)
5. Delta smelt group report

Action Item

Evaluate the data from Mill and Deer Creek RSTs, Tisdale and Knights Landing RSTs and compare the timing of spring-run Chinook salmon migration captured by each data set. [Original date: 11/15/2011; hold until get Mill and Deer Creek data overview from DFG.]

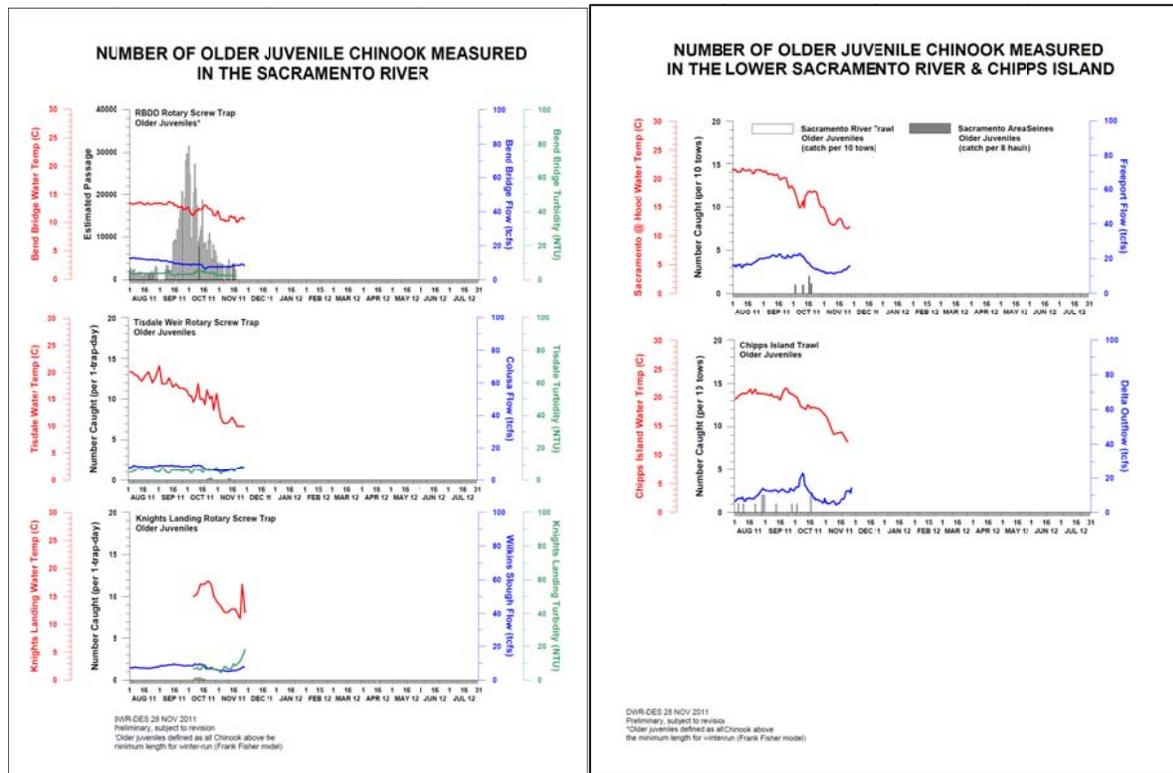
Fish Monitoring: The following table presents fish monitoring data 11/21/11 through 11/28/11. Unless otherwise noted, reported sizes are fork length. See:

<http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm>

Location	Chippis Is. Midwater Trawl	Sacramento Kodiak Trawl	Mossdale Kodiak Trawl	Beach Seines	Knights Landing RST	Tisdale Weir RST
Sample Date	11/23	11/21, 23, 25	11/21, 23, 25	11/21, 22, 23, 25	11/21, 23, 25, 28	11/21, 23, 26, 28
Total Catch	1	0	0	1 (splittail)	0	3
FR						1 (162 mm)
WR						
SR						2 (35 and 38 mm)
Ad-Clipped Chinook						

DS	1 (62 mm)					
SH (ad-clip)						
SH (wild)						
W. Temp. (avg. °F)	54.3	51.4	52.3	52.5	55.5	50.0
Flows (avg. cfs)					6,852	7,477
Turbidity (avg. NTU)					13.3	7.95
WR/LFR Avg. CPUE						0
FR/SR Avg. CPUE						0.188

Key: FR = Fall run; LFR = Late-fall run; SR = Spring run; WR = Winter run; SH = Steelhead; DS = Delta smelt; LFS = Longfin smelt; SPTL = Splittail, CPUE = catch per unit of effort, ACT = acoustical tag



According to the older juvenile Chinook salmon monitoring charts from DWR (above), the number of fish captured in the Red Bluff Diversion Dam rotary screw traps continues to be low, indicating that the earlier pulse of winter-run-size Chinook salmon passed through this location in September and October. Turbidity at Knights Landing has increased during the past week; it was <10 nephelometric turbidity units (NTU) in mid-November and is now nearly 18 NTU. Flows measured at Wilkins Slough increased slightly over the past week.

Code Wire Tags (CWT): No CWT fish have been recovered since June.

Carcass Surveys: The DOSS group was provided with the carcass survey charts for the Merced, Tuolumne, and Stanislaus Rivers (see charts at the end of these notes). The surveys showed an increase in live fish, redds, and tagged fish from about mid-October through mid-November in all three tributaries.

Fish Salvage Data

No listed species were salvaged at either fish facility from 11/21 to 11/27/2011.

White sturgeon: No white sturgeon were salvaged at either facility last week; the season salvage total from 10/1 to present is 56.

Operations (11/29/11)

SWP		CVP	
Exports (cfs)			
Clifton Court Forebay	3,000 through 11/30/11, then targeting 6,680 on 12/1/11 if Delta conditions permit	Jones Pumping Plant	0 (planned outage for maintenance through 11/30/11, then back up to 5 units targeting 4,200 cfs on 12/1/11)
Reservoir releases (cfs)			
Feather - Oroville	2,300 (will increase releases to 5,000 on December 1)	American - Nimbus	2,250*
		Sacramento - Keswick	6,000*
		Stanislaus - Goodwin	500
Reservoir Storage (in TAF, % of capacity)			
San Luis (SWP)	921 (87)	San Luis (CVP)	845 (87)
Oroville	2,810 (79)	Shasta	3,153 (69)
		Folsom	487 (50)
		New Melones	1,962 (81)
Delta Operations			
DCC	Open (will close on Thursday, Dec. 1)	Sacramento River at Freeport (cfs)	15,656
Outflow Index (cfs)	13,538	San Joaquin River (cfs)	1,938
Total Delta Inflow (cfs)	18,560	OMR (daily)	
Water Temperature (°F)		OMR 5 day	
X2 (km)	79	OMR 14 day	
E/I	18.2% (14-d avg.)		

*Because the forecast indicates below-normal precipitation over the next 90 days, releases at Nimbus and Keswick may drop over the next few weeks.

Oroville: The SWP plans to increase the Feather River flow on December 1 in anticipation of higher Delta needs.

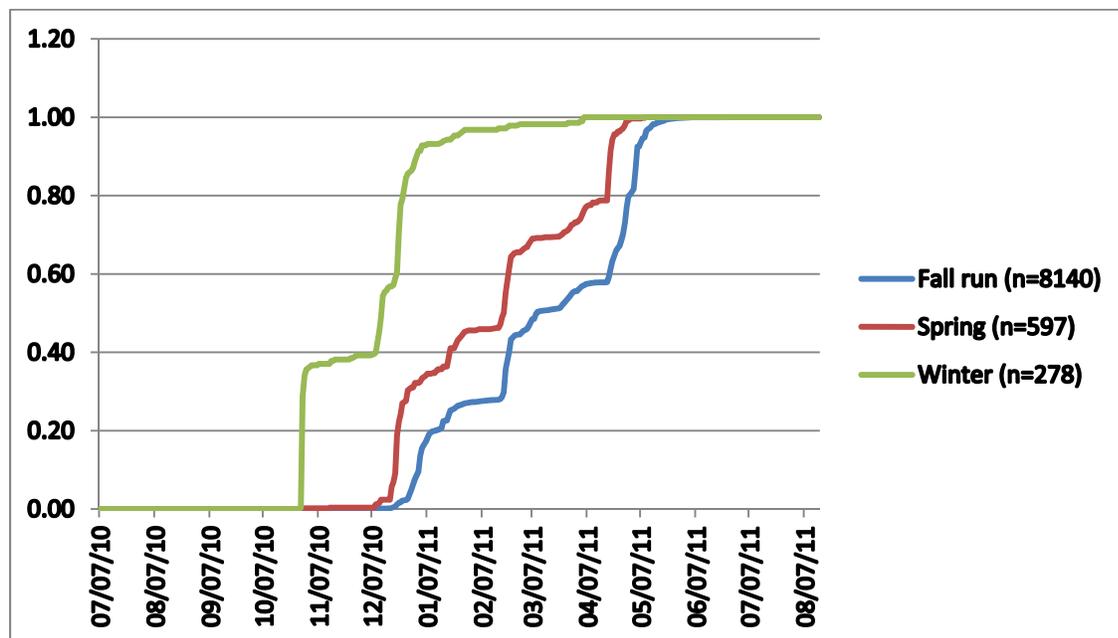
San Luis Reservoir: San Luis Reservoir is currently at approximately 90% capacity and is expected to fill before the end of December.

Goodwin: It was noted that on the escapement survey datasheet for the Stanislaus River, flows were reported to be <350 cfs in recent weeks—a surprise given that Goodwin releases were at 500 cfs. NMFS (Byrne) will look into why the recently reported Stanislaus flows in the escapement summaries are lower than expected.

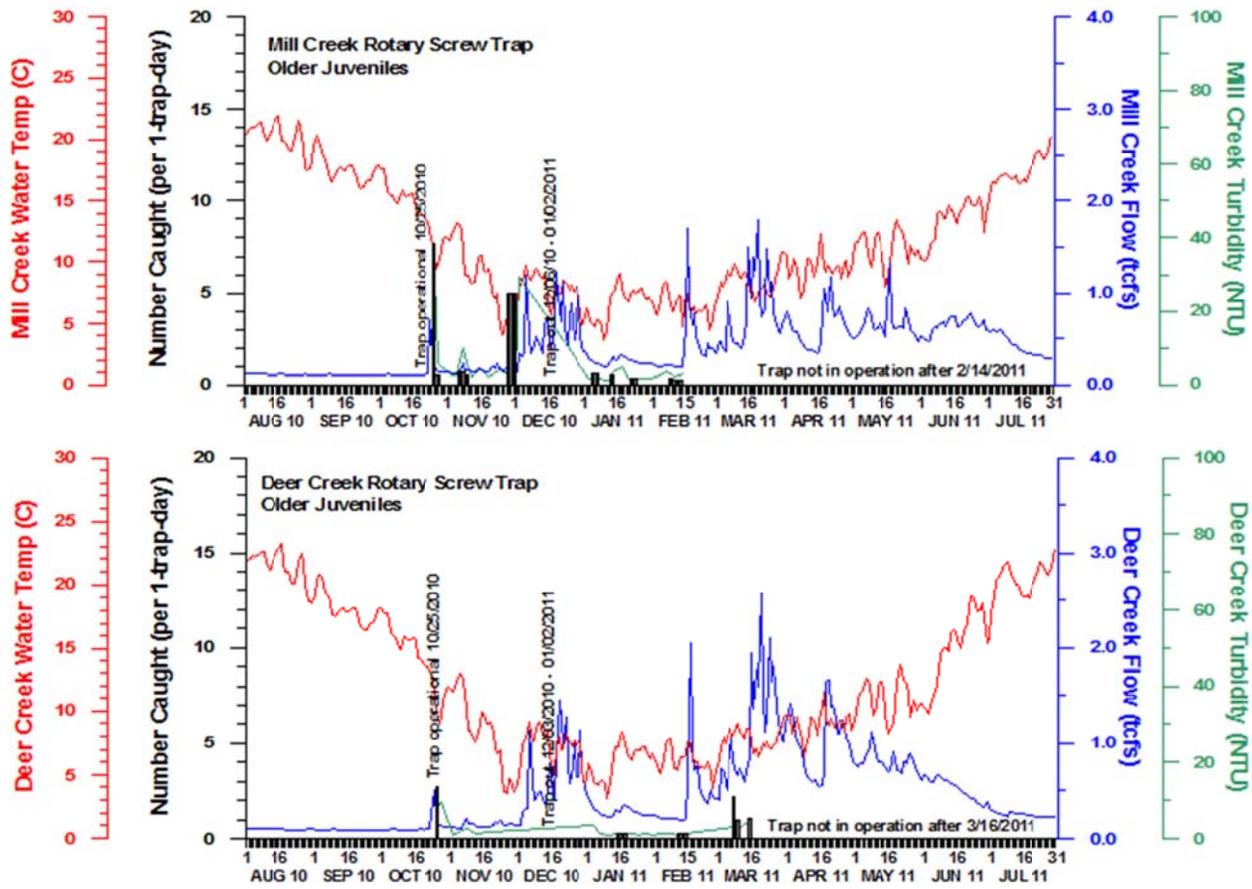
Spring-run surrogate releases at CNFH: Oppenheim was not present to discuss this today, so the group agreed to discuss and suggest a protocol on the release timing of the spring-run Chinook salmon surrogates (SR surrogates) from Coleman National Fish Hatchery (CNFH) by email so that he can provide input. Last year, a single release group of SR surrogates was released in December and two release groups of SR surrogates were combined and released in January.

The group briefly reviewed last year’s data from the rotary screw traps at Tisdale, and in Mill Creek and Deer Creeks.

Reclamation (Israel) provided the graph below summarizing last year’s Tisdale data. This figure shows the cumulative fractional daily catch of fall-run, SR, and winter-run Chinook salmon at the Tisdale rotary screw trap over time. Late-fall-run Chinook salmon were not included because the very low total catch (11 fish) does not allow a very robust conclusion to be drawn regarding migration timing. A big pulse of SR-size fish (~30% of all SR) was observed at Tisdale during December and an additional large fraction of the spring-run- size fish (~20% of all SR) was observed during the first week in February.



The Mill and Deer Creeks summary (Fig. 7 in the DWR incidental take report that is an appendix to the 2011 DOSS Annual Report) shows a pulse of fish in late November; December migration data are not available because the traps were pulled during December because of high flows.



It was suggested that because small tributaries other than Mill and Deer Creeks may be sources of SR in the system, the Tisdale RST data might be a better representation of when upper Sacramento River SR Chinook are moving out.

There was general agreement for splitting releases between December and January; no strong opinions were offered about how to distribute the release sizes between months. Byrne will ask for further input from Oppenheim and send out a draft proposal to the group later this week for quick turnaround so that NMFS can recommend a release schedule to the Coleman National Fish Hatchery by the end of the week.

The group also discussed some additional options for tracking SR migration for the purposes of implementing Action IV.2.3 as follows:

- Use the late-fall-run production release as an additional surrogate group for monitoring wild SR migration from the upper river through the Delta.
- Use the SR releases from the Feather River Hatchery (FRH) as a direct measure of take of listed hatchery produced SR, similar to the winter-run hatchery releases from the Livingston Stone National Fish Hatchery.

It was suggested that these options be considered when reviewing possible adjustments to implementation of Action IV.2.3 (for formal adjustment in water year [WY] 2012 and first implementation in WY 2013). DWR (Llaban) will provide a summary of historical recovery

rates at the fish collection facilities for surrogate releases from CNFH and SR releases from FRH.

A related suggestion was made to consider using listed hatchery steelhead release groups to monitor take at the pumps and implement OMR management under Action IV.2.3; this too may be considered as a possible adjustment to implementation of Action IV.2.3.

Reclamation is developing a pilot study at the Tracy facility that will use genetic markers to determine the origin of all hatchery steelhead observed in salvage. That information will provide the fraction of steelhead from each hatchery, and also provide information about the relative survival of fish released at different release points.

Weather forecast: Below-normal precipitation is forecast over the next 90 days.

Delta Cross Channel (DCC) operations: The Knights Landing Catch Index reported last Friday was zero; therefore, there was no need to schedule a DCC closure for Monday, 11/28. The gates will close on December 1 as indicated per RPA action IV.1.2; because this is a “hard” trigger, there is no need for formal advice from DOSS.

Smelt Working Group (SWG): A kickoff SWG meeting for the 2011-2012 season was held yesterday but there is no SWG recommendation for this week as hydrologic conditions in the Delta are quiet with regard to the delta smelt parameters that trigger operational actions. SWG will monitor the Delta hydrologic conditions during the first 20 days of the month, but will not schedule another meeting until there are imminent changes in the Delta. SWG will begin talks about entrainment of and assessment of risk to delta smelt. After 12/20, SWG will monitor all turbidity stations throughout December; turbidity is the main trigger but temperature may also come into play at some point. No other triggers, such as trawl data, would prompt an operational change at this point. Based on the projected dry weather pattern over California’s Central Valley, it is expected that there will be minimal activity with regard to the delta smelt actions for the foreseeable future.

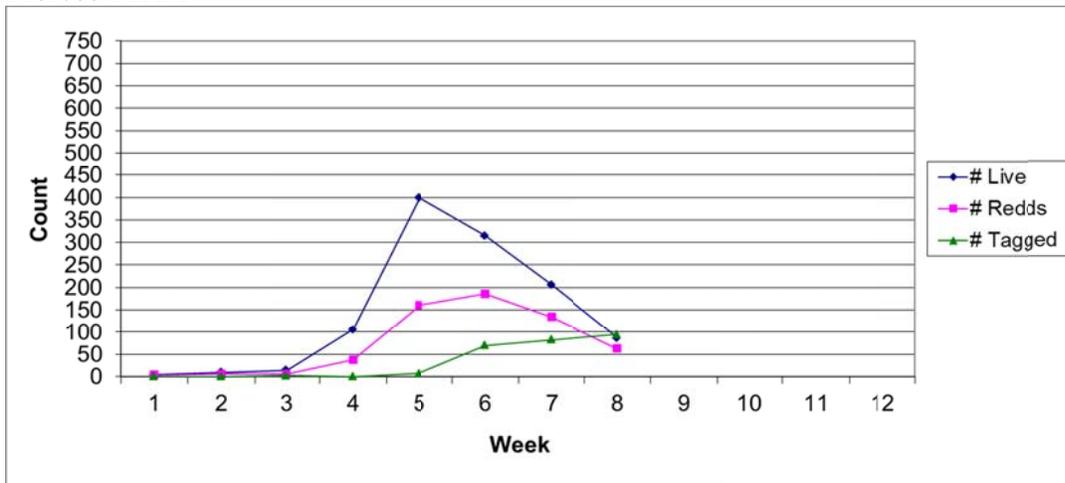
DOSS advice to WOMT and NMFS: None

Next Meeting: December 6, 2011, at 9:00 a.m.

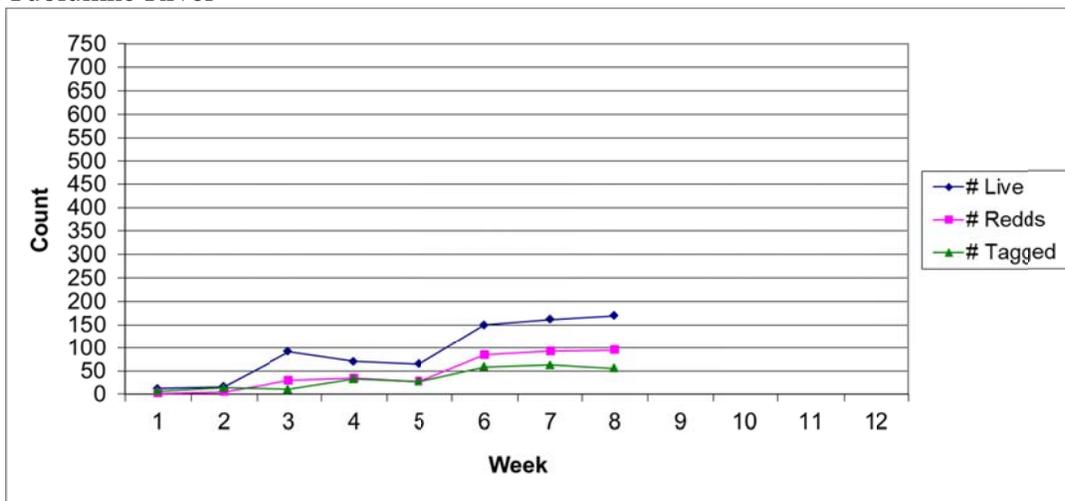
Carcass Summary October 3 through November 21, 2011

Week	Date
1	3-Oct-2011
2	10-Oct-2011
3	17-Oct-2011
4	24-Oct-2011
5	31-Oct-2011
6	7-Nov-2011
7	14-Nov-2011
8	21-Nov-2011
9	28-Nov-2011
10	5-Dec-2011
11	12-Dec-2011
12	19-Dec-2011

Merced MRFF



Tuolumne River



Stanislaus River

