

Delta Operations for Salmonids and Sturgeon (DOSS) Group

03/09/10 Tues conf. call 9:00 am

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 to salmonids and green sturgeon. DOSS will coordinate the work of other technical teams. DOSS notes and advice can be found at: <http://swr.nmfs.noaa.gov/ocap/actions.htm>

Attendees: Mike Ford, Carol Stroble (DWR); Roger Guinee, Craig Anderson, Leigh Bartoo (FWS); Barbara Byrnes, Garwin Yip, Bruce Oppenheim (NMFS); Thuy Washburn, John Hannon (USBR); Greg Wilson (SWRCB); and Matt Nobriga (DFG)

Agenda: review fish monitoring data and Delta conditions

Fish Monitoring:

Knights Landing (2/26 – 3/8): Reviewed trap data from last week. There appeared to be a pulse of juvenile Chinook salmon moving downstream into the Delta last week. Total catch was 800 salmon. Most of these were fall-run Chinook, however, there were 7 winter-run, 34 spring-run, 10 clipped steelhead, and 5 non-clipped steelhead. CPUE remains low for winter-run Chinook (0.62), and steelhead (0.34), averaged for the week.

FWS Delta sampling(2/28 Sunday – 3/6 Saturday):

Mossdale Trawl; 1 winter-run Chinook salmon (identified by length only)

Sacramento Trawl; 32 fall-run Chinook, 11 spring-run Chinook, 12 tagged Chinook, 1 hatchery steelhead

Chippys Island Trawl; 11 winter-run Chinook, 26 tagged Chinook, 9 hatchery steelhead, 9 long-fin smelt, and 3 delta smelt

Beach Seines; 307 fall-run Chinook, 45 spring-run Chinook, 3 winter-run, 6 tagged Chinook, 6 hatchery steelhead, 2 splittail, and 26 delta smelt (mostly from Clarksburg site)

CVP and SWP Fish Salvage Facilities (3/1 Monday – 3/7 Sunday):

Salvage has increased significantly since last week, more than doubling for winter-run Chinook.

Winter-run: This week DFG reported 438 non-clipped winter-run Chinook lost, (150) at CVP and (288) at the SWP, compared to 196 from the week before. The cumulative loss to date is 1,023 non-clipped winter-run Chinook.

Steelhead: 70 non-clipped steelhead were salvaged for the week, (53) at CVP, and (17) at SWP, compared to 52 last week. The combined cumulative salvage to date is 624 non-clipped steelhead (incidental take limit is 3,000). The cumulative salvage of clipped (hatchery) steelhead is 3,211 to date. There is no incidental take limit for hatchery steelhead.

Sturgeon and Smelt: No green sturgeon have been observed since October 1st. At the CVP, 20 delta smelt were salvaged over the week, and 12 were salvaged at the SWP. Cumulative loss for delta smelt to date is 68. No longfin smelt were observed at either facility.

Daily loss and loss density for Chinook salmon (see table 1). Action IV.2.3 in the NMFS opinion First Stage Trigger is a daily loss density (fish per TAF) greater than the incidental take limit/2000 with a minimum value of 2.5 fish/TAF. The second trigger, which has been modified due to errors in transcription from the original Salmon Decision Tree criteria, states daily loss is greater than daily measured fish densities of 8 fish/TAF and 12 fish/TAF based on historical salvage data from 1995 – 2002 (Figure 8, Salmon Decision Process, OCAP BA) Older juvenile daily loss density has been below 6.0 (5.88 highlighted below) up to Sunday, therefore, no action (other than keeping OMR no more negative than -5000 cfs) is indicated.

Table 1.

SWP & CVP
Daily Older Juvenile Chinook Loss & Loss Density
1/1/2010 through 3/7/2010

Date	Older Juvenile Loss (fish)	Older Juvenile Loss Density (fish/taf)
2/28/2010	34.17	2.58
3/1/2010	68.70	4.62
3/2/2010	55.51	3.44
3/3/2010	97.08	5.88
3/4/2010	10.40	0.63
3/5/2010	52.13	2.97
3/6/2010	70.63	4.03
3/7/2010	85.04	5.13

DWR-DES 3/8/2010
Preliminary, subject to revision

Spring-run Surrogate and Winter-run update: Most of the unread tags have been processed. As expected the confirmed loss of spring-run surrogates from the 1/14 release is now 0.546 percent (highlighted below) or 951 fish lost. The loss rate of this group is decreasing, but is projected to reach 0.593 percent (highlighted in second box below), or a loss of 1,033 surrogates. The loss of hatchery winter-run Chinook is 0.013 percent, or 25 fish. The projected loss of hatchery winter-run through 3/7/10 is expected to reach 0.049 percent, or 97 fish. The incidental take limit for hatchery winter-run is 1,087 for this year.

Coleman Hatchery Late-Fall and Livingston Stone Winter Chinook Loss at the Delta Fish Facilities, 2009/2010, BASED ON DWR EDITS TO FWS CWT DATA revised 3/8/2010

Release Date	CWT race	Release Site	Loss	Release Number	% Loss	First Concern Level	Second Concern Level	Date of First Loss	Date of Last Loss
12/16/2009	LF	Battle Cr	1139.25	904699	0.126	n/a	n/a	12/26/2009	3/3/2010
12/28/2009	LF	Battle Cr	56.73	75676	0.075	0.5%	1.0%	1/22/2010	2/2/2010
1/14/2010	LF	Battle Cr	951.80	174386	0.546	0.5%	1.0%	1/24/2010	3/3/2010
2/10/2010	W	Redding*	25.09	198582	0.013	0.5%	1.0%	2/24/2010	3/3/2010

Lost tag	146.36
Unknown	55.08
Non-Read Tags	54.85
Total Non-Confirmed	256.29

Number of Non-Read Tags

11

For Chinook lost 10/1/2009 through 3/7/2010

SWP Tags read 10/1/2009 through 3/3/2010

CVP Tags read 10/1/2009 through 3/4/2010

*Livingston Stone winter-run Chinook release

ESTIMATED NON-CONFIRMED TAGGED LOSS AND NEW TOTAL TAGGED LOSS THRU 3/7/2010						
Loss by Race**		LF	W	Total		
	Lost tag	126.82	19.54	146.36		
	Unknown	55.08	0.00	55.08		
	Non-Read Tags	2.60	52.25	54.85		
	Total Non-Confirmed	184.50	71.79	256.29		
Release Date	Confirmed TagLoss	Proportion Confirmed TagLoss	Non-confirm. TagLoss	New Total TagLoss	Released	%Loss
12/16/2009	1139.25	0.53	97.86	1237.11	904699	0.137
12/28/2009	56.73	0.03	4.87	61.60	75676	0.081
1/14/2010	951.80	0.44	81.76	1033.56	174386	0.593
2/10/2010	25.09	n/a	71.79	96.88	198582	0.049

****Non-confirmed loss from fish similar in size to confirmed clipped W is assigned to W loss**

LF = late-fall Chinook salmon, W = winter-run Chinook salmon

DOSS concluded the fish monitoring data indicate winter-run Chinook salmon are now moving out of the Delta, based on an increase in salvaged fish (doubled since last week) and an increase in the Chipps Island catch rate. Based on historical timing, winter-run Chinook salvage should be at the peak this week. Salvage is likely to remain high, but is still under the modified criteria in the NMFS opinion (8 fish/ TAF) that would require a more restrictive OMR flow. There was discussion as to the criteria used in the NMFS opinion on page 649 and DOSS concluded that clarification of the triggers were needed. Flows into the Delta are expected to be dropping off this week, which may reduce the number of fish salvaged. Freeport has dropped 5,000 cfs from 30,000 cfs (3/1) over the weekend to 25,000 cfs on Monday (3/8). San Joaquin River flow at Vernalis is also dropping.

For fish data at other monitoring sites see:

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

Smelt Working Group (SWG) Leigh Bartoo reported: SWG report:

Still reviewing the notes from Monday. The group felt that -5,000 cfs OMR flow was sufficient to protect larval smelt, however, there was also concern about how close the cumulative loss for adults was to the incidental take limit. Getting near to the end of the adult incidental take period (3/30) should see numbers dropping off. No final determination from FWS had been made.

DFG reported that for longfin smelt the recommendation was the same (*i.e.*, hold at OMR flow - 5,000 cfs).

1) Other Compliance Standards: Old and Middle River (OMR) flow update from USGS CDEC data reported 3/1 from DWR delta operations.

	Current	NMFS Limit	FWS/DFG limit
14-Day Running Average	= -4714 cfs	-5000 cfs	-5000 cfs
5-Day Running Average	= -5321 cfs	-5000 cfs ± 25%	

Latest daily OMR was approximately -6,100 cfs on 3/8, and -6,400 cfs on 3/7.

2) Water operations: Operators reported exports at 4,200 cfs for both CVP and SWP (8,400 cfs combined). However, due to the decreased inflow to the Delta the SWP will drop to 3,800 cfs today, and the CVP expects to drop to 3,400 cfs tomorrow. The cut in exports is necessary to meet the OMR flow criteria of no more negative than -5,000 cfs. The high flows from the San Joaquin River had been keeping the OMR more positive, but now operators have to adjust the pumping rates.

Weather outlook: Dry, no rain for next 10 days.

3) Other items:

Stanislaus River flows were ramped down from 1,000 cfs on 3/8 to 200 cfs on 3/8 due to the increase in flows at Vernalis.

DOSS advice for NMFS and WOMT (3/8-3/15). The DOSS technical team advice to NMFS is to maintain an OMR flow of no more negative than - 5,000 cfs. However, DOSS cautioned that the loss of older juveniles, which includes winter-run and spring-run Chinook, is increasing and that the daily loss densities may trigger an action by this weekend. Daily monitoring should be implemented over the weekend and WOMT notified immediately if the trigger of 8 fish/TAF is met or surpassed.

DOSS also advised that clarification language of the older juvenile loss density criteria should be provide to WOMT.

Next Mtg: Tuesday 3/16 at 9:00 am

Agenda items: VAMP & Export to San Joaquin Inflow Ratio