

## Delta Operations for Salmonids and Sturgeon (DOSS) Group

02/16/10 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 & Andy Chu (DWR), Rodger Guinee (FWS), Jeff Stuart, Barbara Byrne, & Bruce Oppenheim (NMFS), Thuy Washburn and John Hannon (USBR), Greg Wilson (SWRCB), Matt Nobriga (DFG)

**Agenda:** review fish monitoring, need for daily reporting, and spring-run surrogate loss

### Fish Monitoring:

*Knights Landing (KL) from 2/8 to 2/14:* Catch at KL has been tapering off this last week. Total catch declined to 972 for the week, of which 960 were fall-run young-of-year. Catch on Sunday, 2/14, was only 15 fish. The total number of non-clipped Chinook through Sunday was; 8 spring-run, 4 winter-run, and 0 steelhead. The number of ad-clipped (hatchery) Chinook was 1, and the number of ad-clipped steelhead was 4. Total winter-run Chinook catch per unit of effort (CPUE) was 0.26 averaged for the week. Total fall-run Chinook CPUE was 80 averaged for the week.

*FWS data (for 1/31 – 2/6):* No report, due to the holiday on Monday.

*CVP and SWP Fish Salvage Facilities (2/12 and 2/13):* DWR reported on salvage and loss over the weekend, since DFG had no report. Low numbers of Chinook salmon and steelhead were salvaged since Friday.

**Spring-run Surrogates:** The loss of spring-run surrogates from the 1/14 release group most likely passed the first level of concern (0.5 percent) in the NMFS biological opinion (see table below). This was formerly the trigger used in the Salmon Decision Plan to guide managers in determining appropriate protective actions in the Delta. Last week (2/10-2/11) approximately 198,000 winter-run Chinook were released from Livingston Stone National Hatchery at Caldwell Park near Redding (upper Sacramento River). Hatchery winter-run are expected to take 2-3 weeks to migrate down to the Delta.

**Coleman Hatchery Late-Fall and Winter-run Chinook Loss at the Delta Fish Facilities, 2009/2010, BASED ON DWR EDITS TO FWS CWT DATA (Revised 2/12/2010)**

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	938.18	904699	0.104	n/a	n/a	12/26/2009	2/8/2010
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	799.89	174386	0.459	0.5%	1.0%	1/24/2010	2/8/2010
2/10/2010	W	Redding	0.00	198100	0.000	0.5%	1.0%		
		Lost tag	0.00						

Non-read 122.28  
 since 2/8/2010 12:00 159.12  
 Unknown 281.40

For Chinook lost 10/1/2009 through 2/7/2010

SWP Tags read 10/1/2009 through 2/8/2010

CVP Tags read 10/1/2009 through 2/8/2010

DWR ESTIMATE OF NON-CONFIRMED TAGGED LOSS AND NEW TOTAL TAGGED LOSS THRU 2/11/2010							
Release Date	Confirm. Tag Loss	Proportion Confirmed Tag Loss	Proportion Non-		New Total	Release	% Loss
			confirmed Tag Loss	Total			
12/16/2009	938.18	0.52	147.09	1085.27	904699	0.12	
12/28/2009	56.73	0.03	8.89	65.62	75676	0.09	
1/14/2010	799.89	0.45	125.41	925.30	174386	0.53	

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

DOSS concluded the fish monitoring data indicates that listed salmon and steelhead have entered the delta and are being entrained at the export pumps in relatively low numbers. Daily fish loss densities (fish/TAF) are running under 2.1 right now. DOSS discussed the loss of spring-run surrogates from the 2 release groups and concluded that in-river survival was likely higher for the 1/14 release group due to the timing of their release during a storm event (subject to higher flows and less time reaching the Delta). Therefore, more surrogates from the 1/14 release were being observed in the salvage at this time.

For fish data at other monitoring sites see:

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

*Smelt Working Group (SWG) Matt Nobriga reported:* The SWG met on Tuesday and reviewed recent delta smelt salvage and loss at the pumps. One adult smelt was caught at the CVP on 2/9. The SWG concluded that they were not in Action 3, since no spent females had been found in the surveys. The SWG recommended to FWS to relax the OMR flow target from -4,000 cfs to -5,000 cfs. However, because of the required 48 hour notice to the courts this change would not be implemented until this Friday (2/19).

*Green Sturgeon update:* No data to report.

**1) Other Compliance Standards:** Old and Middle River (OMR) flow update

	Current	NMFS Limit	FWS limit
14-Day Running Average	= -4758 cfs	-5000 cfs	-4000 cfs
5-Day Running Average	= -3740 cfs	-5000 cfs + or - 25%	

The daily OMR flow rate is running close to -3,500 cfs as the CVP and SWP projects have conservatively tried to target last week's FWS recommended target of -4,000 cfs. The projected 14 day running average is expected to decrease as these lower values are included in the average. There was some discussion of exactly when the -4,000 cfs target ends and the new -5,000 target would start controlling. Transitional language is still being developed by FWS and Reclamation.

Generally, concluded that the new OMR target would start this weekend, but left it up to WOMT to decide. Export pumping is 5,900 cfs combined.

**2) Turbidity and Temperature:** The 3 station average turbidity was greater than 12.1 NTU on 12/13, and water temperature reached delta smelt spawning criteria (12°C) at several locations.

**3) Water operations:** Current reservoir releases are at, or near minimum release levels: Keswick 3250 cfs, Oroville 1350 cfs, and Nimbus 1550 cfs. Delta outflow has decreased to 25,100 cfs. Flows at Vernalis (San Joaquin River) increased to 2,695 cfs, due to increasing the Stanislaus River to meet the SWRCB D-1641 monthly target. Sacramento River inflow at Freeport decreased to 28,155 cfs. X2 is at 59.4 kilometers and the E/I ratio is 17.4% (standard in Feb. is 35%).

**4) Other items:** American River flows are scheduled to decrease tomorrow due to the low storage in Folsom Reservoir and operating to the Flow Management Standard (FMS). Reclamation is proposing a 250 cfs cut on the American River, from 1550 cfs to 1300 cfs. John Hannon reported steelhead spawning mostly below the Nimbus Hatchery and Sunrise area with some redds near the River Bend Park. Most steelhead redds were at least 30 cm deep. The shallowest redd was in 16 cm of water near the Fair Oaks gauge. Biologists thought that the decrease was not enough to dewater redds, but will check with Mark Gard, FWS, who is out on the river today conducting flow measurements this week.

Stanislaus River was at 1,000 cfs in order to meet the monthly flow required in SWRCB D-1641 at Vernalis (San Joaquin River).

**DOSS advice for NMFS and WOMT (2/16 – 21).** Since the Temporary Restraining Order is in place until Friday, no OMR actions are currently required based on Chinook or steelhead loss criteria in the NMFS opinion. Nonetheless, because of the loss of spring-run surrogates has increased and is approaching the first level of concern, DOSS recommends that OMR be maintained at no more negative than -5000 for the next few weeks. A DOSS call may be convened later this week to review fish monitoring data not available on Tuesday.

Next Mtg: Possibly Thurs 2/18 at 9:00 am