

Delta Operations for Salmonids and Sturgeon (DOSS) Group

Conference call: 02/22/11 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://swr.nmfs.noaa.gov/ocap/htm>

DWR: Andy Chu, Mike Ford, Cynthia LeDoux-Bloom, Angela Llaban

NMFS: Barbara Rocco, Bruce Oppenheim, Barb Byrne, Jeff Stuart, Li-Ming He

DFG: Dan Kratville; **Reclamation:** Thuy Washburn, John Hannon

FWS: Nick Hindman; **SWRCB:** Ann Snyder; **EPA:** not present

Agenda

- 1) Fish monitoring
- 2) Water project operations
- 3) Weather forecasts
- 4) Real-time reporting meeting

Fish Monitoring: The following table presents the fish monitoring data from 2/14/11–2/19/11. (Note: as of 2/20/11 due to the holiday on Monday 2/21/11, no regularly scheduled fish data reports had been received).

Location	Chippis Is. Midwater Trawl	Sacramento Kodiak Trawl	Mossdale Kodiak Trawl	Beach Seines	Knights Landing RST	Tisdale Weir RST	Moulton Weir RST	Deer/Mill Creeks RST
Sample Date					2/14, 2/16, 2/17, 2/18, 2/19			
Total Catch					150			
FR					127			
LFR					0			
WR					2			
SR					21			
(Ad-clips)								
DS								
LFS								
SPTL								
SH (ad-clip)					2			
SH (natural)					1			
Water Temp. (avg. °F)					51			
Flows (avg. cfs)					11,353			
Turbidity (avg. NTU)					16			

FR/SR Avg. CPUE					14.84			
WR/LFR Avg. CPUE					0.19			

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, note that ad-clipped fish and steelhead are not included in Knights Landing total catch.

*There is an error on CPUE calculation for 2/14.

Moulton: Catch went up to 207 on 2/20. CPUE = 1.3. No unclipped steelhead were reported.

Tisdale: Catch went from 18 up to 517 on 2/19/11. Two winter-run Chinook were caught; no unclipped steelhead were caught.

Knights Landing: Flows increased from 7,444 cfs on 2/14 to 16,296 on 2/18 due to the storm. Turbidity increased from 11 NTU on 2/14 to 27 NTU on 2/18. Daily catch of Chinook increased from zero fish caught on 2/16 to 178 on 2/20/11. The first unclipped steelhead of the year was seen on 2/18 and 2 ad-clipped steelhead were caught. 2 winter-run and 21 spring-run were caught.

Salvage data (2/14–2/20/11 DWR reporting) For additional info:

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

Overall catch rate has increased with the recent storm events, and flows and turbidity are higher. Older juvenile Chinook daily loss significantly increased at the salvage facilities. The number of winter-run Chinook salvaged also increased. For steelhead, green sturgeon, delta smelt, no data was reported.

SWP & CVP OLDER JUVENILE* CHINOOK LOSS & LOSS DENSITY 02/14/2011 through 02/20/2011

Date	OLDER JUVENILE LOSS** (# fish)			Combined Older Juvenile Loss Density (fish/TAF)
	SWP	CVP	Combined	
02/14/2011	0	0	0	0
02/15/2011	0	0	34.64	1.97
02/16/2011	0	0	17.32	0.97
02/17/2011	0	2.72	11.38	0.63
02/18/2011	0	0	77.94	4.51
02/19/2011	138.56	2.72	141.28	7.51
02/20/2011	112.58	2.72	115.30	5.89

DWR-DES 2/14/2011

Preliminary, subject to revision

*Older juveniles defined as all Chinook above the minimum winter run length (Delta Model)

**Loss data obtained from DFG, Stockton

Summary: DOSS noted that the first trigger (> 3.33 fish/TAF) of Action 4.2.3 in the NMFS BiOp was reached on 2/18/11 and the 2nd trigger of > 6.64 fish/TAF) was reached the following day on 2/19/11.

Smelt working group (SWG) update: The group was meeting concurrently with the DOSS meeting, so there were no notes to review; however, it was reported that water temperatures

overall were down and turbidity was up as a result of the last storm event. Water temperatures were approximately 50.0–52.16°F; turbidity ranged from < 10.0 NTU to > 40 NTU over the weekend. Both temperature and turbidity were below the delta smelt trigger points. No smelt were salvaged. The risk of entrainment is low; the overall risk to smelt species is moderate. There were no recommendations. Overall flows have increased into the Delta with the recent storm events as reported by the SWG.

3rd larval survey: There were a lot of longfin smelt caught in the western Delta. Approximately 1,100 longfin larvae were caught at Sherman Island; most of the rest were from the Sacramento Ship Channel and the western Delta.

Operations

SWP		CVP	
Flows/Exports (cfs)			
Clifton Court Forebay	6,000	Jones Pumping Plant	2,800
Outflow		American- Nimbus	2,500
Total Delta Inflow	53,213	Sacramento-Keswick	3,900
		Stanislaus - Goodwin	200
Feather - Oroville	1,750		
Sacramento River at Freeport	39,019		
San Joaquin at Vernalis	11,696	Merced	
OMR (daily)	-2600	Mokelumne	
OMR 5 day	-4,683	Tuolumne	
OMR 14 day	-4,617		
Reservoir Storage (TAF)			
San Luis	1,014	San Luis	1,988
Shasta	3,708		
Folsom	640		
Oroville	2,622		
Delta Operations			
Delta Cross Channel gates	closed		
Outflow Index (cfs)	50,800	X2	6.4 km
E/I (%)	28.6		
Water Temperature (°F)	48.7		

San Luis Reservoir: The State share is still approximately 40 TAF below capacity. Reclamation is about 8 TAF above its maximum share.

OMR flows: DWR finds that the USGS gage data and the index equation data are very similar.

Weather forecast: Another storm event is approaching on Thursday (2/24). The fish salvage numbers are dropping; however they could increase with the next storm event.

DOSS will meet again before the weekend to look at the current salvage data to determine whether triggers are met and flows need to be adjusted. DOSS is not receiving updated daily salvage information from the various websites. Therefore, DWR will follow up with daily email updates when loss density at the fish facilities is a concern. DWR (Llaban) will send updated salvage/loss information to DOSS by the end of today. It is necessary that NMFS notify DWR

when a trigger is reached? Yes, DWR wants NMFS to weigh in on the decisions on export changes.

DOSS advice to WOMT and NMFS: The DOSS group met Tuesday morning and discussed the recent increase in winter-run salvage and loss at the pumps. The loss density criteria in the NMFS OCAP BiOp was triggered on Friday, 2/18/11 (4.51 fish/TAF). NMFS was notified on Saturday, 2/19/11. The second trigger for loss density was hit on Saturday, 2/19/11 (7.51 fish TAF). NMFS was notified on Sunday, 2/20/11, that DWR was changing its operation (reducing exports from 7,000 cfs to 6,000 cfs) today to meet an OMR flow of no more negative than -2,500 cfs. No change in CVP operations. DOSS confirmed the salvage calculation and loss expansion, although official numbers were not available from DFG (due to holiday on Monday). The DOSS advice to NMFS and WOMT is to reduce pumping at the SWP to meet the second trigger criteria in the NMFS BiOp for 5 consecutive days 2/22 through 2/26/11. DOSS will reassess on Friday whether the loss density is low enough for DWR to increase pumping on Sunday. However, since 3 consecutive days below the criteria are required, we will not know until Sunday whether pumping can increase.

Additional Action items:

- 1) Garwin Yip and Maria Rea, NMFS, were added to the DWR email notification list when the loss triggers are met
- 2) DWR will give NMFS daily updates over weekends and holidays when fish salvage is high (close to a trigger in the NMFS biological opinion).
- 3) NMFS still needs to notify DWR when a trigger has been met

Next Meeting: Conference call, 2/25/11 at 1:30 p.m. to review salvage data.