

Delta Operations for Salmonids and Sturgeon (DOSS) Group

12/22/09 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.

Attendees: Mike Ford, Mitch Goode, Carol Stroble and Reza Shahcheraghi (DWR), Roger Guinee (FWS), Jeff Stuart (NMFS), Greg Wilson (SWRCB), Matt Nobriga (DFG) and Bruce Herbold (EPA). No one attended from the Bureau of Reclamation

Agenda items:

Fish monitoring

Water Quality

Delta Smelt criteria, turbidity & temp.

Fish Monitoring: Knights Landing (KL) summary:

Date	Flow cfs	Water T (F)	Secchi (ft)	Turbidity NTU	Species	Catch	Min FL	Max FL	CPUE
12/14/09	5378	47	1.5	15.4	LF	1	149	149	0.245524297
12/15/09	5852	49	1.4	19.9					
12/16/09	5595	53	1.5	15.1					
12/17/09	7693	51	1.3	22.5	2WR, 1LF	3	64	114	1.531914894
12/19/09	7101	52	1.5	19.2	WR	1	83	83	0.24742268
12/20/09	6330	52	1.7	15.6					

Knights Landing

River flows, water temperatures, and turbidity at KL increased early in the week, leveled off mid-week, and started to decline over the weekend. Five Chinook salmon were captured during the past week in the KL rotary screw traps (RSTs). Three winter-run sized fish were recovered last week, 2 on 12/17/09 and 1 on 12/19/09. Two late-fall sized fish were recovered during this same period, one on 12/14/09 and the other on 12/17/09. Sacramento River flows remained relatively steady through the early part of last week at 13,000 cfs before increasing to a peak on Saturday of approximately 14,000 cfs. Flows began to decline on Sunday (12/20/09) to approximately 13,000 cfs. Rain will be moderate and most of the week will be dry according to the National Weather Service forecast. There is a slight chance of rain next weekend and continuing into the first part of next week.

FWS data (for 12/13 – 12/19):

Beach Seines

One late-fall run Chinook salmon was caught at Clarksburg on 12/15. Six winter-run sized Chinook salmon were caught in Sacramento River seines last week. Two fish were caught at Elkhorn, one on 12/16 and the second on 12/19. The remaining four fish were caught at Sherwood Harbor, two on 12/16 and two on 12/18. Two fall-run sized fish were recovered, one at Discovery Park on 12/18, and the second fish at Elkhorn on 12/16.

Sacramento trawls

One fall-run sized Chinook salmon was captured on 12/16 in the Sacramento trawl. No salmonids were captured in the Mossdale trawls during last week.

Chippis Island

One late-fall sized Chinook salmon was captured in the Chippis Island trawl on 12/18. 29 longfin smelt were caught in the Chippis Island Trawl as well as 15 delta smelt (range 55 to 69 mm) none of which exhibited mature gamete expression. Delta smelt do not typically begin to ripen until at least February so this lack of evidence for reproductive readiness is normal.

(Mitch Goode: data for the week of December 8 - 14, 2009)

Mill Creek: 33 spring-run (yearlings), 5 steelhead, and no juvenile Chinook salmon in the RST.

Deer Creek: No Chinook salmon last week, 1 steelhead. RST was not operating properly due to storm.

CVP and SWP Fish Salvage Facilities: In the last week (12/14 to 12/21) one adult steelhead recovered on 12/20 at 3 am with a length of 437 mm. No Chinook salmon or delta smelt were recovered. (Bob Fujimura, email dated 12-22-09). For other monitoring sites, see: <http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm>

No Delta Smelt Working Group meeting was held this week. Turbidity is below the 12 NTU trigger point and no delta smelt have been recovered at the facilities during this past week. Since it is after December 20, the FWS BO indicates action 1(b) from the RPA Component 1 should be in effect when and if the triggers are met. Once triggered, OMR flows must be maintained no more negative than -2000cfs on a 14-day running average and no more negative than -2500cfs on a 5-day running average.

1) Delta Cross Channel (DCC) gate ops: DCC gates closed on December 15 at 10 am. Barring any water quality issues, the gates will remain closed until May, per the NMFS' Biological Opinion RPA action and the terms of D-1641.

2) Rio Vista Flow Standard: The current 7-day average for Rio Vista flows is 10,083 cfs (D1641 standard $\geq 3,500$ cubic feet per second [cfs]) and the monthly average is 6,441 cfs (standard $\geq 4,500$ cfs). Thus flow standards are being met at the Rio Vista compliance point.

3) Other Compliance Standards: Current Export to delta inflow ratio (E/I) is 47 % (standard $\leq 65\%$), Monthly Net Delta Outflow Index (NDOI) average is 6842 cfs (standard $\geq 4,500$ cfs) and the 7-day NDOI average is 8,991 cfs (standard $\geq 3,500$ cfs). Electrical conductivity (EC) is satisfactory at all stations except Old River near Tracy. 30 day average, 1.2 mS/cm, is over the criterion, (standard ≤ 1.0 milli Siemens/centimeter [mS/cm]). This is likely due to a strong point source, more than likely related to municipal or industrial runoff as most agricultural sources are not discharging now. Current water quality is still well below the 250 mg/l Chloride standard for all export locations. The salinity traces along the waterways leading to the compliance point have crept upwards due to the current spring tidal pattern. Currently, Jersey Point EC trace is at

1.75 mS/cm with a 14 day average of 1.56 mS/cm, which will be monitored closely with the spring tide event occurring during the last week of December.

4) Turbidity: Turbidity remains low in the delta. Current levels of turbidity (expressed as a 3-day average) at the three Delta smelt RPA compliance points are: Prisoners Point 5.6 NTU, Holland Cut 2.4 NTU, and Victoria Canal 7.6 NTU. The triggering level is 12 NTU at all three stations.

5) Water operations: Current reservoir releases are at, or near minimum release levels: Keswick 3250 cfs, Oroville 1350 cfs, and Nimbus 1800 cfs. Storage at Shasta is 1,737 thousand acre feet (taf), storage at Oroville is 1,054 taf, storage at Folsom is 276, and at San Luis is 782 taf, SWP share is 276 taf. OMR flow is -4,474 cfs (14 day average) and -5,811 cfs (5-day average). Current exports are 4000 cfs at Clifton Court and 2700 cfs at the Jones plant. Flows are 1,377 cfs at Vernalis (San Joaquin River) and 12,090 cfs at Freeport (Sacramento River).

The DOSS group was briefed by Greg Wilson (State Board) on the upcoming informational proceeding for the State Board's development of flow criteria for the Sacramento-San Joaquin Delta. Evidence regarding the development of the new delta flow criteria should be completed by February 15 for the March 22 proceeding.

No advice to WOMT or NMFS for the week of 12/22 to 12/28.

Next Mtg: 12/29/09 at 9:00 am.