

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

**Conference call: 12/14/10, 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:** Angela Llaban, Mike Ford, Andy Chu, Cynthia LeDoux-Bloom

**FWS:** Nick Hindman

**NMFS:** Barb Byrne, Barbara Rocco, Bruce Oppenheim, Jeff Stuart, Garwin Yip, Jeff Stuart

**DFG:** Dan Kratville, Joe Johnson

**Reclamation:** Thuy Washburn, Josh Israel

**SWRCB, EPA:** not present

### **Agenda**

- 1) Fish monitoring
- 2) Operations
- 3) Spring-run surrogate releases
- 4) Second Trigger
- 5) Annual Review
- 6) Other business

### **Fish Monitoring (12/6 to 12/13/10)**

**Knights Landing:** flows doubled to 16,808 cfs between 12/6/10 and 12/8/10. Total catch increased to 82 salmon from 12/8/10 through 12/12/10, 49 of which were caught on Thursday, 12/9/10. Of the total, 3 were fall run, 3 were spring run, 74 were winter run, and 2 were late-fall run. CPUE peaked at 22.0 for winter and late-fall run on 12/9/10; highest so far this year. Fish from both Tisdale and Moulton should show up at Knights Landing today or tomorrow.

**Tisdale Weir:** flows doubled to 16,600 cfs between 12/6 and 12/8/10 and then decreased to 13,000 cfs by 12/12/10, and turbidity increased to 18 NTU by 12/9/10. 64 salmon were caught in the rotary trap weir from 12/8/10 through 12/12/10. Of those, 42 were winter run, 7 were fall run, 10 were spring run, 2 were late fall, and 3 were adipose-clipped Chinook. There are 40 river miles between Tisdale and Moulton Weirs.

**Moulton Weir:** Total fish caught was 219 salmon of which 4 were fall run, 4 were spring run, 54 were winter run, 4 were late fall, and 153 were adipose clipped and most likely from the Coleman Hatchery late-fall production release, which began on Thursday 12/9/10. Flows reached a high of 19,480 cfs on 12/7/10 and dropped to 12,339 cfs on 12/12/10. Turbidity reached a high of 19.1 NTU on 12/8/10 but was down to 9.3 NTUs by 12/12/10.

**Mossdale Trawl:** Last week (11/28-12/3), 3 salmon, most likely fall-run, were caught moving downstream just before the pulse of winter-run (12/4) was observed at the fish salvage facilities. This week (12/6 – 12/13), there were no species of concern caught.

Sacramento Trawl: 21 salmon were caught between 12/8 and 12/10/10. Of those, 7 were fall run, 13 were spring run, and 1 was winter run. Water temperature ranged from 10.0 to 11.7°F.

Chippis Is. Trawl: 30 delta smelt were caught. Fork length ranged from 53 to 70 mm. No salmon were caught. Temperatures ranged from 10.6 to 11.9°F.

Beach Seines: There was a total of 442 fish caught from 12/6/10 through 12/10/10 of which 353 were fall run, 54 were spring run, 4 were late-fall run, 29 were winter run, and 2 were splittail. Water temperatures ranged from a low of 10.3°F on 12/7/10 to 13.1°F for several days beginning 12/10/10.

Salvage Data: A big pulse of salmon came through last week. Eighty-four salmon were salvaged on 12/4, all were at the federal fish facility; since then it has declined. There were none caught at SWP. At this time of the year, many emigrating fish from the San Joaquin River end up at the federal facility; most from Sacramento River side end up at the state facility. There is usually a delay in when fish show up at state facility. Fish could be “eaten” before they get to the state facility in Clifton Court Forebay or just take longer to get there from the Sacramento side. The State was doing some maintenance at the fish facility and running all salvage through the old building; this may have had something to do with the zero salvage. They are now back to normal operations in the new building. **Action:** Andy will check with state facility about why they think the numbers are so low at the SWP facility. Clifton Court Forebay gates should be open more so this shouldn't have an effect.

Daily Loss Density: Daily loss has gone down since the pulse of winter-run last Saturday. Older juvenile loss: the daily combined (CVP + SWP) loss was 9.86 at highest on 12/6/10. The combined daily loss density was less than 1.0 fish/taf for the entire week. Not yet near the criteria trigger point. Older juveniles are defined as any salmon larger than the minimum winter-run size at length. This size range changes daily based on predetermined growth curves developed for each salmon race Fisher (1992) and modified for the Delta.

## **Operations**

CVP:

San Joaquin River at Vernalis: holding between 4 and 5k cfs for this weekend.

Sacramento River--Keswick Dam release: increased up to 15,000 cfs; not enough water to overflow into the Yolo bypass; but other weirs are set up to flood first.

American River—Folsom Dam release: increased up to 15,000 cfs yesterday

Stanislaus River—Goodwin Dam release: 200 cfs

Forecast for Sacramento River -Verona: The NOAA National Weather Service's River Forecast Center projects storm coming today and later this week: flows should be close to 30,000 cfs by the end of this week.

SWP:

Freeport: Flows increased to ~40,000 cfs last week then dropped to 26,800 cfs yesterday

San Luis Reservoir: 625,000 af storage on the state side, 1,265,000 af total

Feather River: 1,750 cfs coming out of Oroville

Outflow: 20,000 cfs today; E/I ratio = 35%; water quality looks fair for the chloride standard.

Delta: SWP pumping at 6,400 cfs, CVP at 4,200 cfs; export level will remain the same between mid- and the end of December. Mechanical issues at the SWP are controlling their export pumping at this point.

DCC Gates: Water quality is still fine; gates will remain closed.

### **Spring-run surrogate release**

DOSS is considering one release this month; one in January. We will probably combine two release groups in January. It was suggested that we move the release date up for December (12/21-12/23) because the late fall production fish had already been released and we want to spread out the release of surrogates a bit more. Coleman Hatchery was okay with that but wanted to know whether we want to leave a 4-day storm window. Bruce reported back that this was confirmed. Also, the hatchery could not divide up the 3 release groups evenly between the 2 release dates (previous action item).

### **Second Trigger**

Need to firm up advice from DOSS on the second trigger and whether DOSS agrees with what was decided or discussed by the subgroup. The subgroup had a proposal of a density trigger of 8 fish for the 1<sup>st</sup> stage trigger and 12 fish for second stage trigger per 1,000 af. DOSS should come up with advice to WOMT for the second trigger. We should either agree on the second trigger through DOSS or have recommendations from subgroup by January 1. This is in NMFS' biological opinion (BO); we did not see the final recommendation from the subgroup. It would be helpful for those of us not in subgroup to see what's been recommended; the subgroup came up with a written conclusion per Sheila Greene (DWR); this can be forwarded to the DOSS team. Sheila did not develop the trigger, but provided a narrative. DOSS needs to receive the report and make a decision. NMFS should provide the language to the DOSS group. We thought we had a second trigger that made sense; we're waiting for Sheila to write up the justification based on the historical development of second trigger. She still had two questions: do we need 2<sup>nd</sup> trigger, and is it appropriate? This was not the charge of the subgroup, which was to recreate the 2<sup>nd</sup> trigger; DOSS didn't have the background information to make a decision on this. No one put together a precise summary for DOSS and ultimately for NMFS to consider. Sheila works for Kathy Kelly; someone could contact Kathy to let her know that it is important that Sheila continue to work on this; we need to see some specific language on how the equation for the second trigger was developed. **Action item** for next week. NMFS to send out summary of the subgroup notes and Sheila's email.

### **Annual Review**

The Integrated Annual Review report from the independent science panel should be coming out for public disbursement on Thursday, 12/16. We will have to review any recommended changes in operations or technical changes for the DOSS group.

### **Other Business**

Smelt Working Group (SWG): met yesterday; Fall Midwater Trawl Index was at 18 for September, October, and November; the Recovery Index is 11. SWG expecting another trawl next week; no salvage of smelt reported; low index did not include December. San Pablo Bay had quite a few fish; the numbers are expected to go up from that; western Delta had a large increase; turbidity triggers were discussed: 5 stations will be monitored. SWG is considering two new stations for a total of five. FWS BO calls for three stations; however, SWG agreed to monitor two new stations. SWG was not sure if they're seeing the actual turbidity pulse so they want to monitor two more stations. It will not change any official "rules" but we will be able to better see the pulse. It will take only three of the five stations to meet the trigger criteria of 12 NTU. FWS would select which three. The two new stations are located at Old and San Joaquin Rivers.

**DOSS Advice for NMFS and WOMT:** No advice for this week

### **Next Meeting**

Conference call: 12/21/10 from 9:00 to 11:00 a.m.