

SMELT WORKING GROUP
Monday, January 30, 2012

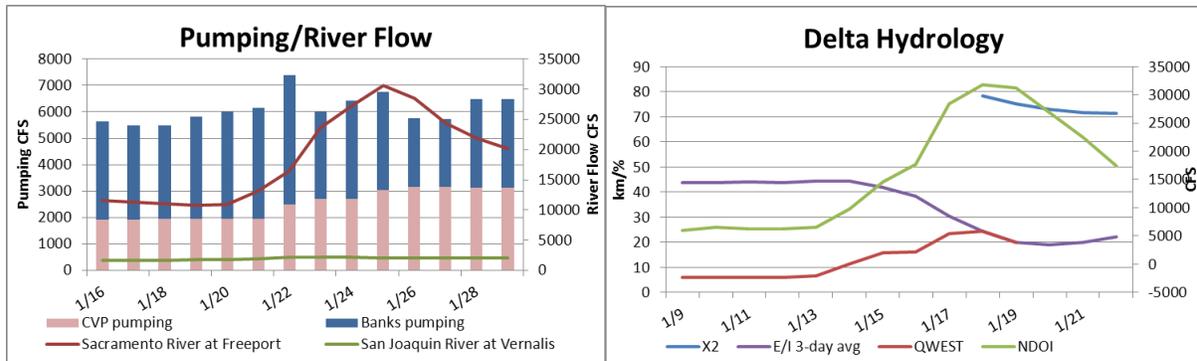
Meeting Summary:

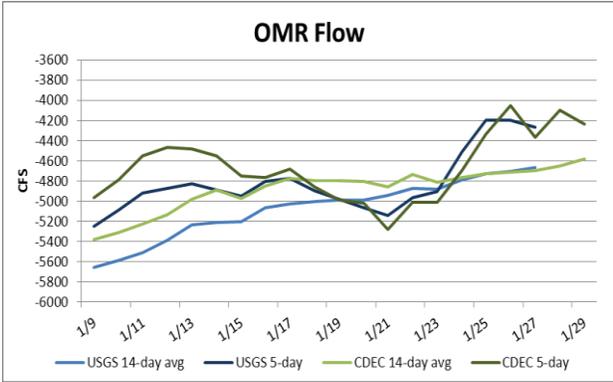
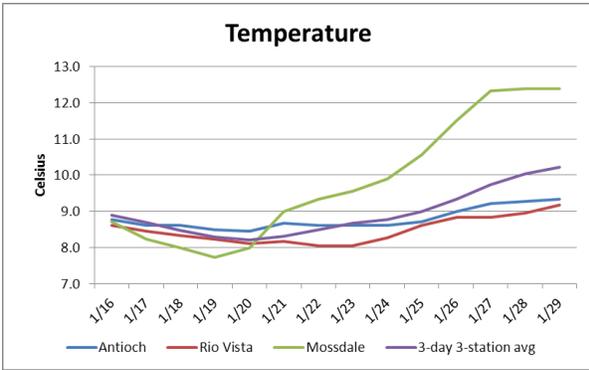
The Working Group will continue to monitor salvage, survey data, and hydrological conditions and will reconvene February 6 at 10am, if conditions warrant. The Working Group agreed that given their present distribution, low levels of salvage since 1/24/12, and turbidity levels remaining low for the north and south Delta, risk of entrainment of delta smelt remains low and therefore, no recommendation was made by the Working Group. The Working Group also agreed that given their present distribution, the NMFS -5000cfs OMR flow restriction was sufficient to protect longfin smelt.

Reported Data:

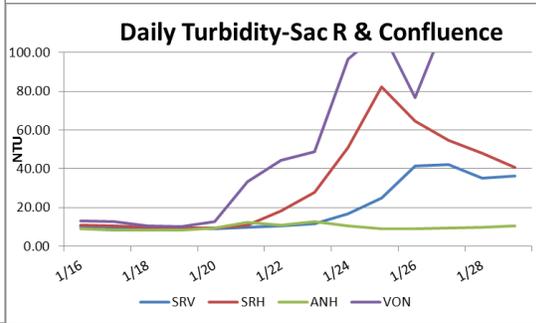
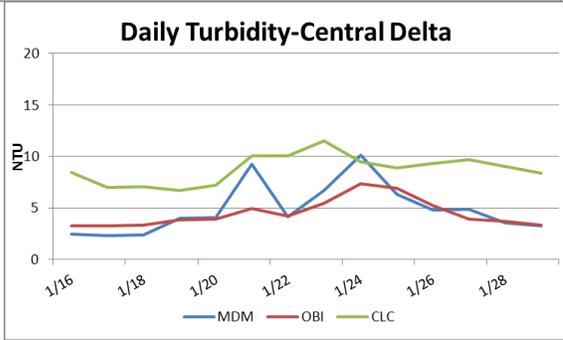
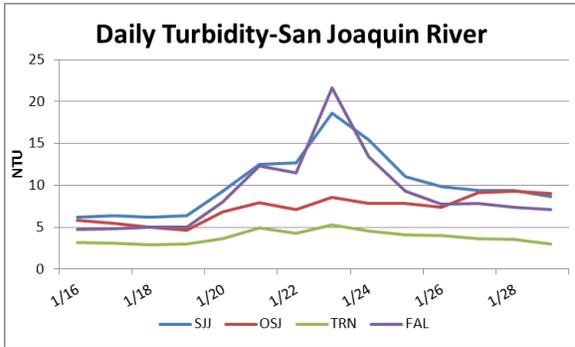
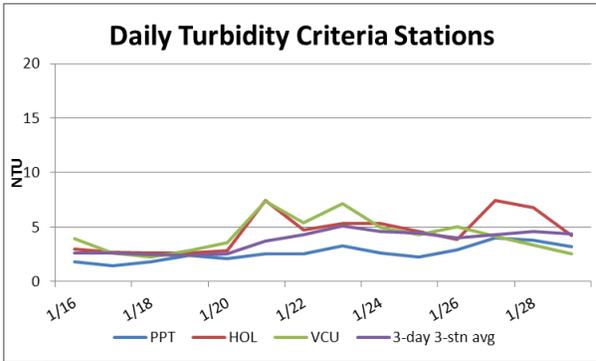
1) Current environmental data:

- **Water temperature** for the 3 station average is 10.2°C.
- **OMR:** USGS tidally-averaged OMR 5-day average for January 27 was -4,268cfs and the 14-day average was -4,669cfs. CDEC 5-day average on January 29 was -4,232cfs and the 14-day average was -4,581cfs.
- **Flow:** Sacramento River inflow is 20,193cfs and San Joaquin River is 1,988cfs. X₂ calculation from CDEC is 71.45km. The NDOI for January 29 was 17,401cfs. Qwest was approximated as -500cfs as of January 29. The graphs below show the most recent trends in Delta hydrology and water quality that were evaluated by the Working Group.





• **Turbidity:**



2) Delta Fish Monitoring:

Results from Smelt Larval Survey #2 indicate most longfin smelt are centered around the confluence area. One adult delta smelt was collected at station 723. A total of 3324 larval longfin smelt were collected. Smelt Larval Survey #3 is in the field the week of February 6. Results from Spring Kodiak Trawl #1 indicate the largest concentrations of adult delta smelt are in the Sacramento River and downstream of the confluence. SKT #2 is in the field the week of February 13. See “WEEKLY ADVICE FOR THE DEPARTMENT OF FISH AND GAME FOR LONGFIN SMELT” for additional details. The annual FMWT Delta Smelt Index for 2011 is 343 (sum of all four months). The 2011 Delta Smelt Recovery Index (based on September and October) is 55. More information on the Recovery Index can be found on the Bay-Delta Office’s

web site at <http://www.fws.gov/sfbaydelta/> under “hot topics.” Results from CDFG surveys are available online at: <http://www.dfg.ca.gov/delta/>

3) Salvage:

No longfin smelt has been salvaged in water year 2012. A total of four delta smelt (estimated) were salvaged each day at the CVP facility on January 18, 24, 25 and 28, 5 delta smelt (estimated) were salvaged at the CVP on January 26, and 2 delta smelt (estimated) were salvaged at the CVP on January 27, which brings the cumulative total for adult delta smelt for WY 2012 to 23.

4) Expected Project Operations:

Combined CVP/SWP exports are approximately 6,150 cfs as of January 30. CVP share of San Luis Reservoir is 98% of capacity. Combined SWP/CVP pumping will be adjusted to meet the NMFS RPA restriction for OMR flow no more negative than -5,000cfs as well as SWRCB February standards.

5) Particle Tracking Modeling:

The Working Group did not request PTM runs for this week.

6) Assessment of Risk:

Background: The period covered by RPA Component 1, protection for pre-spawning adult delta smelt, Action 1(a) (pp 280-282 in the B.O. and Attachment B, pp 329-351), is December 1 through 20. Historic salvage patterns indicate that an entrainment event is unlikely during this period. The Working Group may recommend an action during this period based upon examination of turbidity and salvage data, as well as parameters such as the location of X2, apparent abundance, and river flows. The historic likelihood of an entrainment event increases after December 20, the period covered by Component 1, Action 1(b). If turbidity criteria are met or exceeded after December 20, Action 1(b), setting average daily OMR flow no more negative than -2000 cfs for a 14-day period, will begin. The salvage criteria for initiating an action are three consecutive days of salvage or a one-time salvage of 343 delta smelt (estimated). Component 1, Action 2 (pp 280-281 and Attachment B, pp 352-356) is implemented following the conclusion of Action 1.

Combined incidental take levels for State and federal fish facilities are based on the most recent FMWT abundance index. The 2011 FMWT index for delta smelt is 343. This means that the authorized incidental take of adults is 2,487 (estimated) and the concern level is 1,862 (estimated), cumulative for the December through March period. Irrespective of Delta conditions, Action 1 would be initiated if salvage at the export facilities occurs on three consecutive days, or exceeds 343 on any given day (B.O. pp 281 & 329).

Table 1: Incidental Take Levels for the Larval/Juvenile life stage (cumulative)

	Concern Level	Take Limit
April	101	151
May	4,471	6,705
June	11,327	16,991
July	12,851	19,276

Discussion: The Working Group reviewed and discussed all relevant data from fish surveys, Delta monitoring, salvage, and planned Project operations. Although salvage has occurred on several consecutive days (January 24 through 28), the numbers have been low (2-5 fish salvaged per day). Distributional information from SKT#1 indicate the greatest densities of delta smelt are in the Sacramento River and downstream of the confluence. The overall conditions and data indicate a low risk of entrainment.

7) Longfin Smelt:

Longfin smelt larval distribution (Smelt Larva Survey 1, January 9-10) exceeded the criteria for advice from the SWG under the SWP’s 2081 permit; CDFG therefore requested that the Working Group discuss entrainment risk for longfin smelt. The 2081 identifies OMR flow between -1250 and -5000cfs as the range to select from in determining a level adequately protective of longfin larvae. Because relatively few larvae were collected in the central and south Delta, the risk is currently low. Longfin smelt hatching typically peaks early to late February, and outflow and Qwest have been positive for several days, which likely decrease the risk of entrainment. See “WEEKLY ADVICE FOR THE DEPARTMENT OF FISH AND GAME FOR LONGFIN SMELT” for additional details regarding this discussion.

The Working Group will hold the next call on February 6.