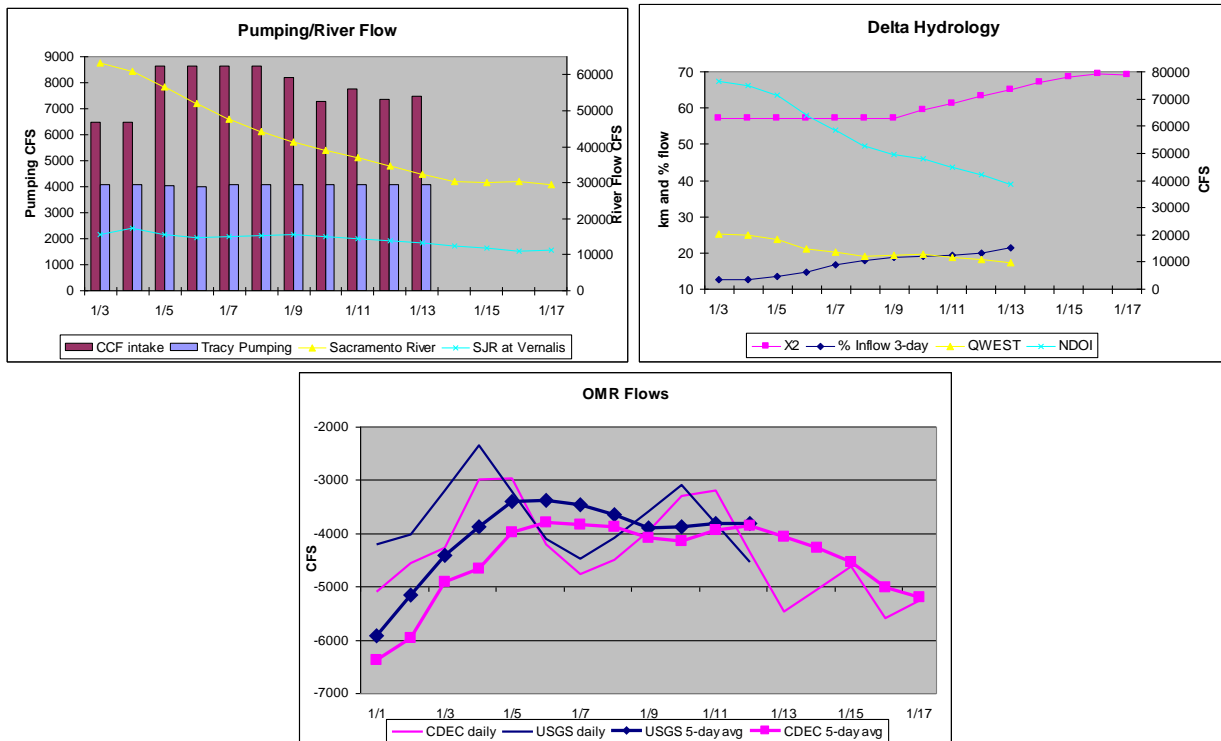


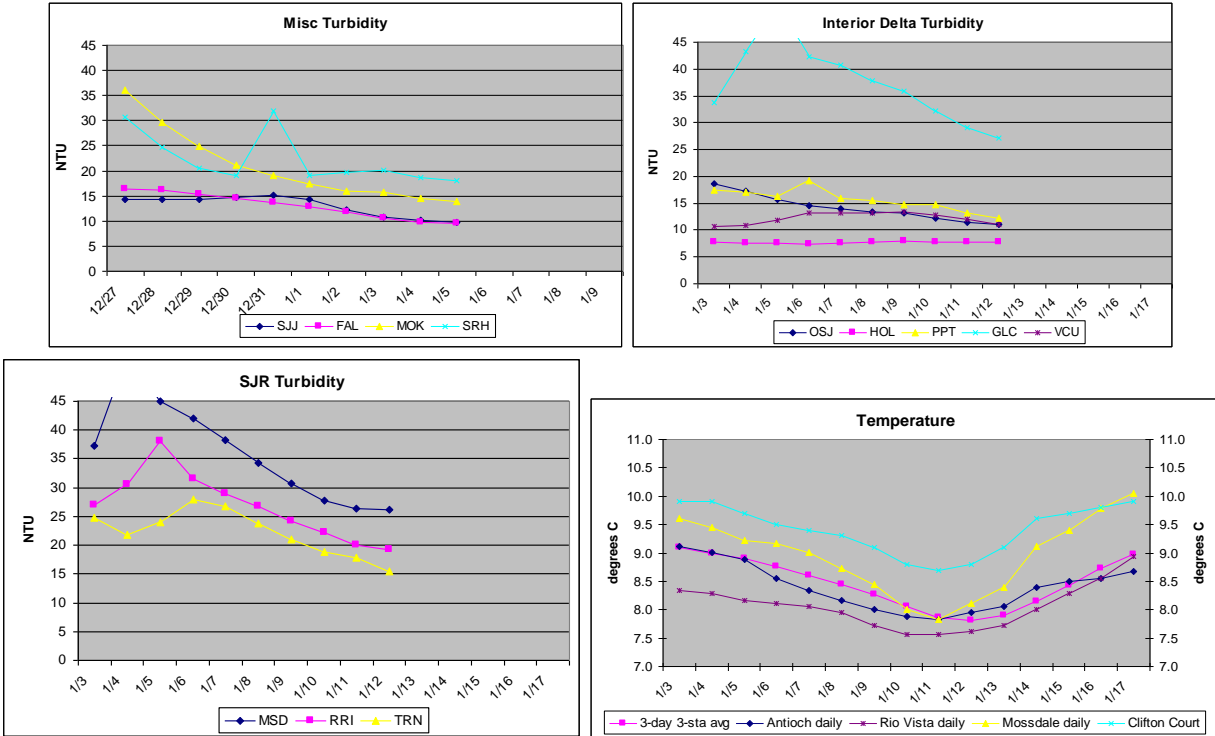
The Working Group will continue to monitor salvage, survey data, and hydrological conditions and will reconvene January 24. No recommendation was made.

1) Current environmental data.

- **Water temperature** for the 3 station average is 9.0°C.
- **OMR** USGS tidally-averaged OMR was -4,550 cfs on January 12, 2011. The 5-day USGS OMR was -3,828 cfs. The OMR average estimate from CDEC on January 17, 2011 is -5,269 cfs. The 5-day CDEC OMR is -5,203 cfs.
- **Flow** Sacramento River inflow is 29,571 cfs and San Joaquin 11,200 cfs. X₂ is 69.09km. As of January 13 E/I ratio is 21.3%, QWEST is 9,689 cfs and NDOI is 38,796 cfs. The graphs below show the most recent trends in Delta hydrology and water quality that were evaluated by the Working Group.



- **Turbidity** Three-day criterion station averages were 13.39NTU at Prisoner’s Point, 7.76NTU at Holland Cut and 11.95NTU at Victoria Canal. Criteria for the implementation of Action 1 were not met or exceeded. Additionally, the Working Group reviewed turbidity data for several stations in and around the Delta.



2) Delta fish monitoring:

Spring Kodiak Trawl #1 and the Bay Study were in the field last week. SKT #1 collected delta smelt in the south and central Delta, Sacramento River, Honker and Grizzly bays, and all 3 Montezuma Slough stations, for a total of 177 fish collected (128 from station 719 during a 5 min tow, half the normal trawl time). 155 fish were collected from the Sacramento River area, 17 from Suisun Bay and Montezuma Slough, and 5 from the central and south Delta. 160 delta smelt were in pre-spawn condition, while the sex of 17 fish could not be determined. SKT #2 will be in the field the week of February 7. Smelt Larva Survey #1 is in the field this week and the second survey will take place the week of January 31. The final 2010 FMWT Index is 29 for delta smelt and 191 for longfin smelt. The 2010 Delta Smelt Recovery Index (based on September and October) is 11. 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 larval surveys, SKT, and 20mm Surveys are available online at: <http://www.delta.dfg.ca.gov/delta>

3) Salvage

A total of 4 adult delta smelt were salvaged at the CVP on January 14. A total of 4 adult delta smelt were salvaged at the CVP on January 15 and 17; for a total of 8 fish. No salvage had been previously reported for longfin smelt or delta smelt at the SWP since June 2010. Criteria for the implementation of Action 1 were not met or exceeded.

4) Expected Project Operations

Combined CVP/SWP exports are expected to remain at about 11,600 cfs this week. Vernalis flow is expected to increase slightly by the end of the week. The Projects will be operating to meet the -5,000 cfs OMR flow requirement.

5) Particle Tracking Modeling

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

6) Discussion for Recommendation

The Working Group reviewed and discussed all relevant data from fish surveys, Delta monitoring, salvage, and planned Project operations. No recommendation was made.

RPA Component 1, Action 1 is intended to protect pre-spawning adults during the first flush, as they move into their spawning areas. The WY 2011 first flush has likely passed through the Delta. Component 1, Action 2 (pp 280-281 and Attachment B, pp 352-356) may be implemented following the conclusion of Action 1, or the first flush. Criteria for the implementation of Action 2 are more varied and more flexible than those for Action 1.

The 2010 FMWT index for delta smelt is 29. This means that the authorized incidental take of adults is 210 (estimated) and the concern level is 157 (estimated), cumulative for the December through March period. Under the low-entrainment risk scenario for the implementation of Action 2, the salvage criterion is a Daily Salvage Index greater than or equal to 1 (i.e., 29, estimated; B.O. p 338).

Sacramento River flows have decreased over the past week and are expected to continue to decrease. Flows on the San Joaquin River currently are at 11,200 cfs and are anticipated to increase slightly by the end of the week.

Data from the SKT Survey #1 indicate that the majority of fish are located in the Sacramento River Deep Water Shipping Channel. The protocol for the tow at this station (719) has been modified (reduced to 5 minutes) in recent years in an attempt to decrease potential take. The length of tow for all other stations remains at 10 minutes.

The Working Group noted that the last time adult delta smelt were collected in the SKT in the south Delta was February 2006. Some members found the presence of adult fish in the south Delta to be cause for increased concern; most, however, considered it normal. The low levels of salvage at the facilities that are expected to occur over the coming weeks are not likely to raise concern overall. If salvage increases or the distribution of delta smelt changes, the Working Group will re-evaluate the estimate of the risk of entrainment.

The Working Group estimated that the risk of entrainment for any fish in the central and south Delta was high, but the overall level of risk was low given the distributional data from the SKT Survey #1 (especially considering the reduced tow length at station #719). Turbidity is low and

hydrology remains favorable, which indicates a low level of risk for entrainment. Apparent abundance remains very low, and the recent occurrence of first flush conditions raises concern for the species into the moderate range. Delta smelt upstream migration likely is ongoing. The risk of delta smelt entering the central and south Delta is likely to remain low, due to decreasing Delta turbidity and the anticipated level of flow for the San Joaquin River. The Working Group believes that, based upon what is known of Delta conditions and delta smelt distribution, a modification of Project operations to protect delta smelt is not yet warranted.

WEEKLY ADVICE FOR THE DEPARTMENT OF FISH AND GAME FOR LONGFIN SMELT

Recommendation for week of January 18, 2011:

The Smelt Working Group does not have a longfin smelt recommendation at this time.

Basis for recommendation:

The 2009 State Water Project 2081 for longfin smelt states that advice to the DFG Director shall be based on:

1. Adult Salvage – total adult (≥ 80 mm) longfin smelt salvage (State Water Project + Central Valley Project) for December through February > 5 times the Fall Midwater Trawl longfin smelt annual abundance index.
2. Adult abundance, distribution or other information indicates that OMR flow advice is warranted.
3. Larva distribution in the Smelt Larva Survey or the 20mm Survey finds longfin smelt larvae present at 8 of 12 Central and South Delta sampling stations in 1 survey (809, 812, 815, 901, 902, 906, 910, 912, 914, 915, 918, 919).
4. Larva catch per tow exceeds 15 longfin smelt larvae or juveniles in 4 or more of the 12 survey stations listed.

The first longfin smelt of the season was salvaged on January 14, 2011: a single 130 mm fish was salvaged at the Central Valley Project. No other longfin smelt were salvaged through January 17, 2011. The combined salvage level threshold for advice is 955 (see criterion in #1) based on a Fall Midwater Trawl longfin smelt annual abundance index of 191 for 2010. A few longfin smelt were collected during January fish surveys within the Delta, but all came from the Sacramento River. In early January sampling, Bay Study collected 4 longfin smelt in the Sacramento River from lower Decker Island upstream to Rio Vista, but none in the San Joaquin River. The Spring Kodiak Trawl collected 8 longfin smelt in the lower Sacramento River between 3 Mile Slough and Sherman Lake; no longfin smelt were collected in the central or south Delta. No advice is warranted based on this criterion.

San Joaquin River flow remains over 11,000 cfs (Figure 1) and Sacramento River flow was declining toward 20,000 cfs on January 15 when currently available data ended (Figure 2). The San Joaquin River flow remains above the lower threshold for entrainment risk to longfin smelt

based on the State Water Project 2081. Also, for several weeks both projects have been operating to a National Marine Fisheries Service criteria of no more negative than -5,000 cfs Old and Middle River net flows. Such a criterion would tend to reduce the risk of entrainment of adult longfin smelt. The most recent fish survey information for longfin smelt, the January Bay Study and Kodiak Trawl surveys, also suggests very low risk. Although adult longfin smelt are moving upstream in the estuary to spawn, high Sacramento and San Joaquin river flows and X2 at 69 km in Suisun Bay make it unlikely that a high proportion of the longfin smelt population will move into the Delta. This may change as flows continue to decline. Given this information, no advice is warranted based on criterion 2 at this time.

The first Smelt Larva Survey of the season was initiated on January 18, so no data are currently available to evaluate criteria 3 and 4.

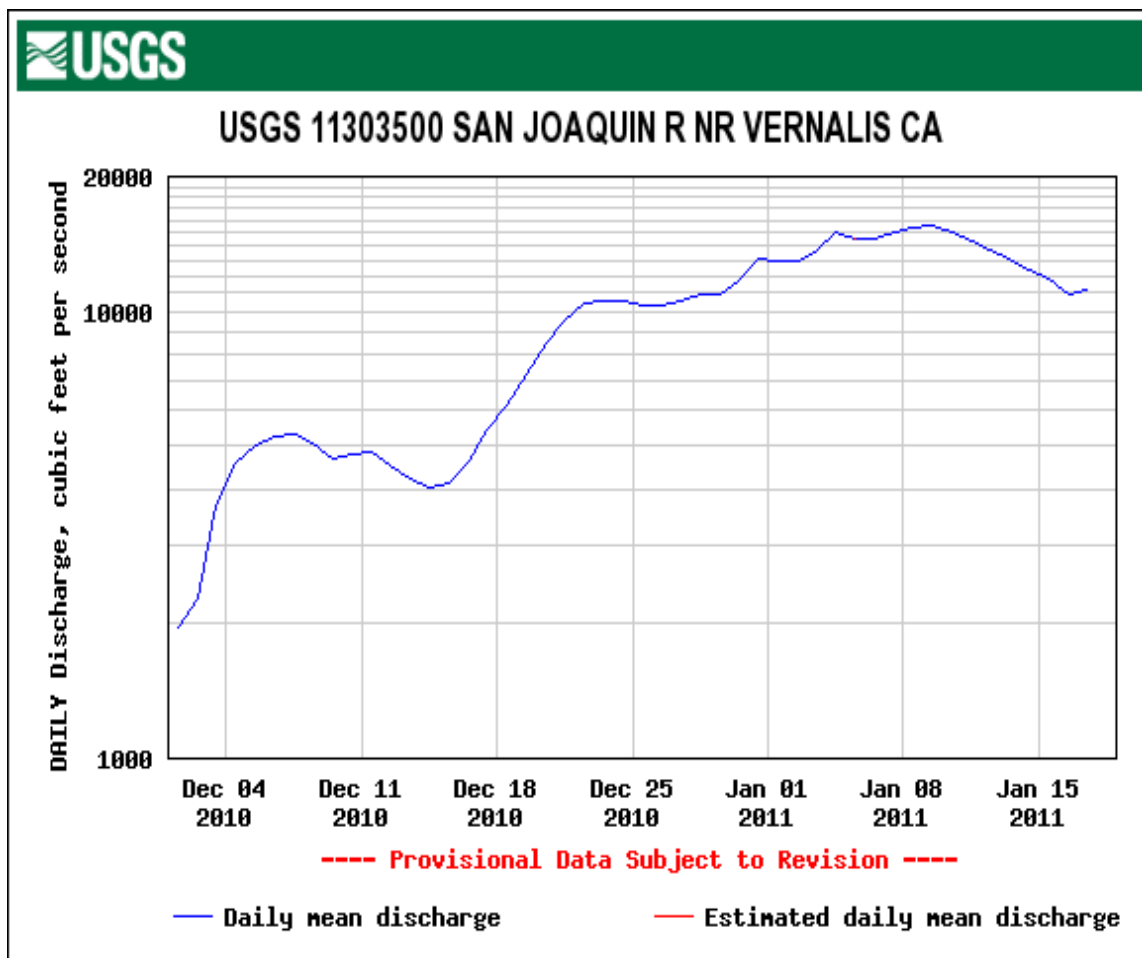


Figure 1. Tidally averaged San Joaquin River flow measured near Vernalis, December 1, 2010 through January 18, 2011.



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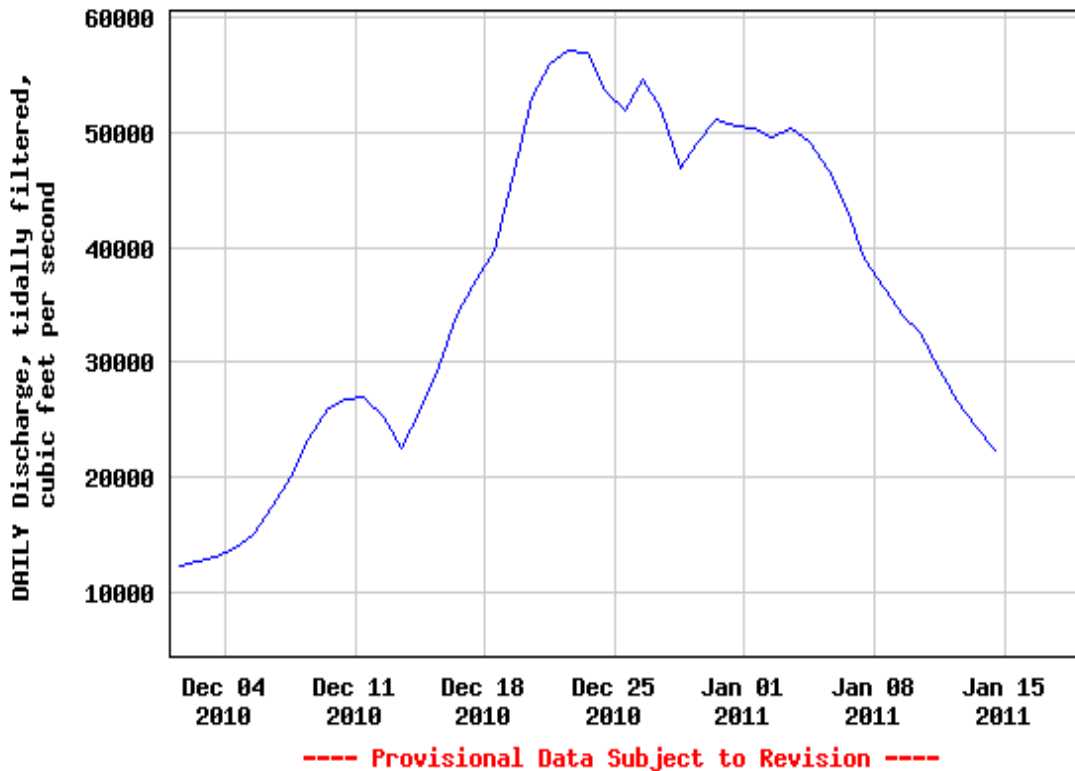


Figure 2. Tidally averaged Sacramento River flows measured at Rio Vista, December 1, 2010 through January 14, 2011 (no data available for January 15-18, 2011).

The Working Group will reconvene on Monday, January 24 at 10am to review the updated flow, turbidity, and other appropriate data.