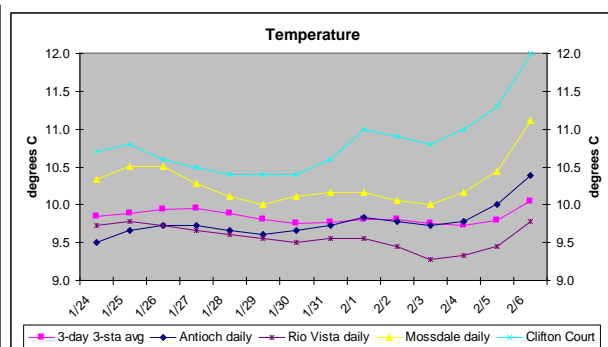
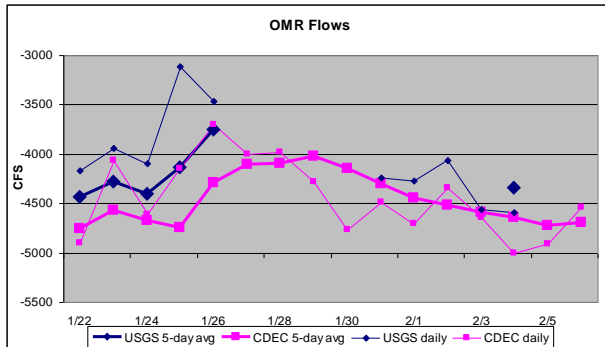
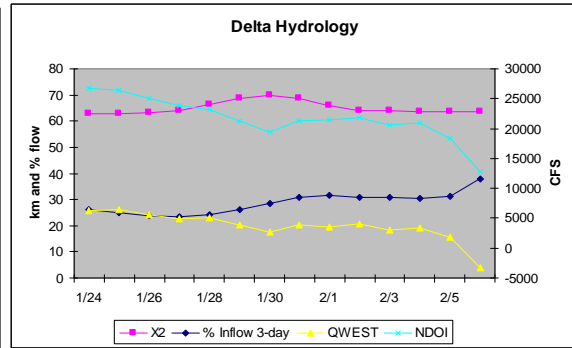
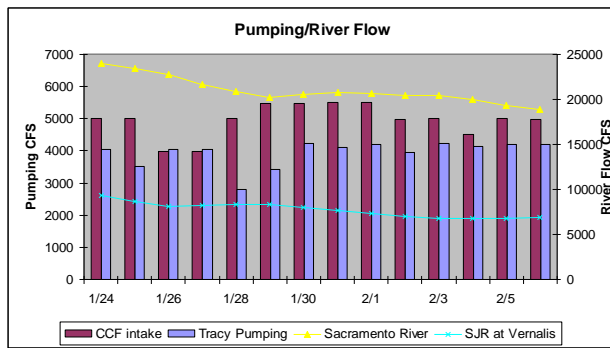


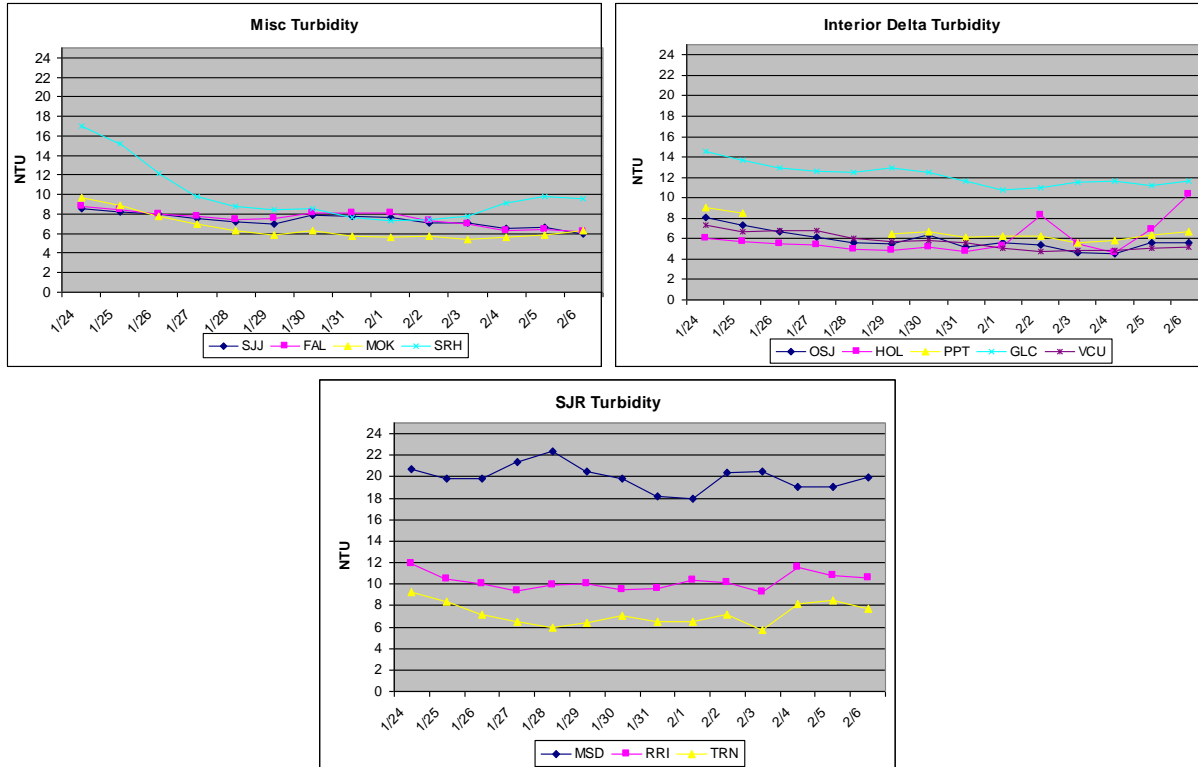
The Working Group will continue to monitor salvage, survey data, and hydrological conditions and will reconvene Feb. 14. No recommendation was made.

1) Current environmental data.

- **Water temperature** for the 3 station average is 10°C.
- **OMR** USGS tidally-averaged OMR was -4,590 cfs on February 4, 2011. The 5-day average OMR was -4,344 cfs. The OMR average estimate from CDEC on February 6 was -4,544 cfs. The 5-day CDEC OMR is -4,689 cfs.
- **Flow** Sacramento River inflow is 18,913 cfs and San Joaquin 6,870 cfs. X₂ is 63.55km. As of Feb. 6 E/I ratio is 37.7%, QWEST is -3,337 cfs, and NDOI is 12,740 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 7.29NTU, 5.02NTU, and 6.28NTU for Holland Cut, Victoria Canal, and Prisoner’s Point, respectively. Additionally, the Working Group reviewed turbidity data for several stations in and around the Delta.



2) Delta fish monitoring:

Smelt Larva Survey #2 was in the field last week. A single adult delta smelt was reported at station 723. No delta smelt larvae were collected. Spring Kodiak Trawl #2 is in the field this week. Results will be available on Feb. 14. 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

No longfin or delta smelt were salvaged from Jan. 18 through Feb. 6. Four adult delta smelt were salvaged at the CVP on January 15 and 17, for a total of 8 fish. No salvage has been 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 at 9,100 cfs as of Feb. 6. The CVP has filled their share of San Luis Reservoir and have reduced their pumping to 2,700 cfs. They are expected to maintain pumping to match demand, between 1,600 and 2,700 cfs. Vernalis flow is expected to remain close to 6,000 cfs. SWP is increasing pumping today to 6,000 cfs. They expect to continue filling their share of San Luis Reservoir, although an anticipated fill date was not available. The

projects will be operating to meet the -5,000 cfs OMR flow requirement (as per the NMFS Biological Opinion).

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 and San Joaquin River flows have decreased slightly over the past week.

The Working Group estimated that the overall risk of entrainment was low given the distributional data from recent surveys. Turbidity is low and hydrology remains favorable (although QWEST became negative on Feb. 6), which also indicates a low level of risk for entrainment. Apparent abundance remains very low, which raises concern for the species into the moderate range. The risk of delta smelt entering the central and south Delta likely is expected to remain low, due to low Delta turbidity and the anticipated level of flow for the San Joaquin River.

The Working Group noted the first occurrence of negative QWEST for 2011 as of Feb. 6. The Group noted that delta smelt in the central and south Delta could be at increased risk for entrainment with this change in hydrology. Distributional data (although dated) indicate the majority of the species is outside of the influence of the pumps. Results from SKT #2 will be available next week and the Group will examine the data closely.

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.

Assuming that San Luis Reservoir will fill, possibly sometime in February, the SWG made a formal request for an estimate from DWR regarding the potential demand for Article 21 water. The Service in turn brought this request to the WOMT. During the WOMT discussion, DWR

noted that it views all water exported as Project water, and that to separate the demand for this water from the demand for other Project water is not appropriate when viewing the total exports. However, the purpose behind the SWG request was to gain an estimate for the overall trend for export pumping following the filling of San Luis; e.g., would pumping trend up, down or remain about the same. Unfortunately, due to the uncertainties of hydrology and demands, it makes predicting the timeframe for and the volume of Article 21 a challenge. DWR plans to continue exporting water in compliance with the all the existing requirements while trying to meet the demands of the State Water Contractors.

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

Recommendation for week of Feb. 7, 2011:

The Smelt Working Group does not have any advice based on longfin smelt information and believes that the current OMR limit in place for salmon and steelhead (no more negative than -5,000 cfs) is protective of longfin smelt 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.

As of Feb. 6, no longfin smelt had been salvaged since the first longfin smelt of the season was salvaged on Jan. 14, 2011 and none had been collected in the central or south Delta in fish surveys. No advice is warranted based on this criterion.

Longfin smelt larvae were detected during the Smelt Larva Survey #1 (January 18-19), providing evidence of spawning and initiating SWP Longfin Smelt ITP section 5.2 to protect larval and juvenile longfin smelt. However, OMR restrictions under section 5.2 are not required when river flows are: 1) greater than 55,000 cfs on the Sacramento River at Rio Vista; or 2) greater than 8,000 cfs on the San Joaquin River at Vernalis. Sacramento River flow at Rio Vista was briefly above 55,000 cfs Dec. 21-23 and San Joaquin River flow surpassed 8,000 cfs on Dec. 20 and dropped below the 8,000 cfs on Jan. 31. San Joaquin River flow declined to 6,873 cfs on February 6 (Figure 1; and DWR Delta Operations Summary) and Sacramento River flow declined to just over 16,000 cfs on Feb. 6 (Figure 2; and DWR Delta Operations Summary).

During the most recent Smelt Larva Survey (SLS #2, Jan. 31- Feb. 1), longfin smelt larvae were collected at 10 of 12 central and south Delta sampling stations, surpassing the threshold for criteria #3 above and **OMR flow advice is warranted. However, no advice is given, because the current OMR limit (-5,000 cfs) implemented to protect Chinook and steelhead is deemed protective for the population.** During Smelt Larva Survey 2 (Jan. 31 – Feb. 1), longfin smelt larvae were caught at 10 of 12 central and south Delta criteria stations (see list in #3 above) in very low numbers, except at the 3 western-most San Joaquin River stations (809, 812, 815) and in Franks Tract (i.e., 901; Table 1). Qwest was positive for 4 days after collection (see delta smelt graphics above), which would tend to transport larvae in the San Joaquin River and Franks Tract westward rather than southward. In SLS #2, based on incomplete sample processing, most larvae were collected in the lower Sacramento River and Suisun Bay, well outside the region where entrainment is possible; less than 10% of the incomplete total larva catch came from central and south Delta stations (Table 1). Current OMR (-4300 and -4700 cfs, 5-day avg.) remains within the target range listed in the longfin smelt ITP of -5,000 cfs to -1250 cfs. No additional advice to protect larvae is warranted at this time based on criteria 3 and 4.

Barker Slough export pumping advice shall apply January 15 through March 31 of dry and critically dry years. Currently the Sacramento River is classified as above normal (<http://cdec.water.ca.gov/cgi-progs/reports/EXECSUM>), so no Barker Slough advice is warranted.

USGS 11303500 SAN JOAQUIN R NR VERNALIS CA

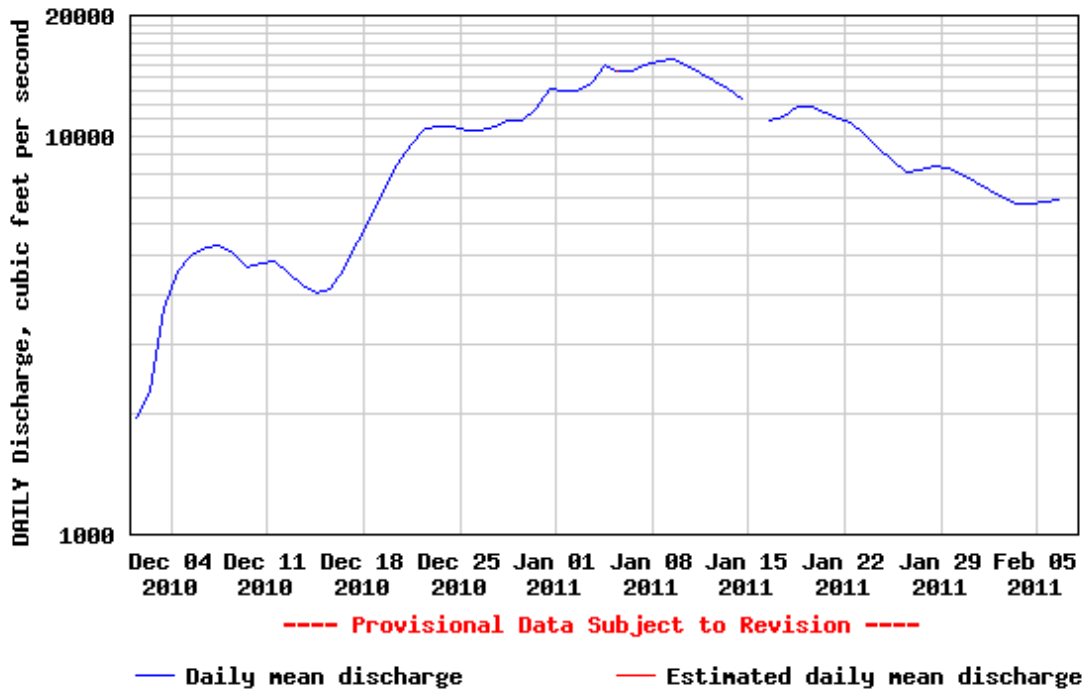


Figure 1. Tidally averaged San Joaquin River flow measured near Vernalis, December 1, 2010 through February 7, 2011.



USGS 11455420 SACRAMENTO R A RIO VISTA CA

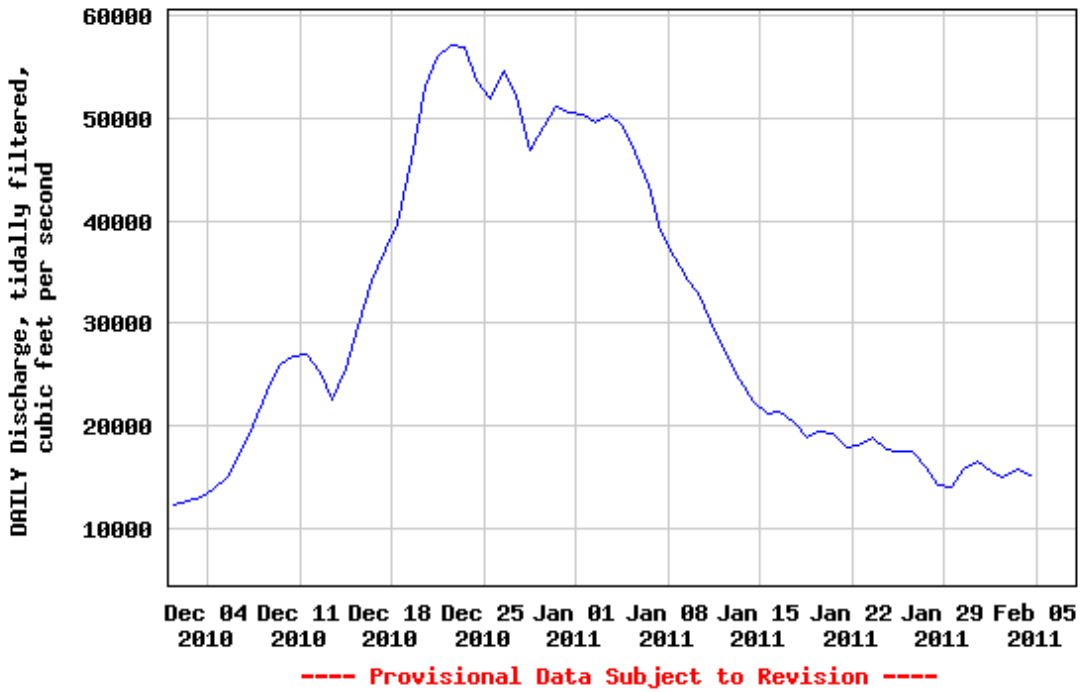


Figure 2. Tidally averaged Sacramento River flows measured at Rio Vista, December 1, 2010 through February 4, 2011.

Table 1. Longfin smelt catch per station from 2011 Smelt Larva Survey, Survey 2 (partial; for samples processed through February 3, 2011).

Year	Survey	SLS Station	Sample Status	Species	Smelt Catch
2011	2	405	Not yet processed		
2011	2	411	Not yet processed		
2011	2	418	Not yet processed		
2011	2	501	Processed	Longfin Smelt	170
2011	2	504	Not yet processed		
2011	2	508	Processed	Longfin Smelt	152
2011	2	513	Processed	Longfin Smelt	74
2011	2	519	Processed	Longfin Smelt	118
2011	2	520	Processed	Longfin Smelt	91
2011	2	602	Not yet processed		
2011	2	606	Processed	Longfin Smelt	43
2011	2	609	Not yet processed		
2011	2	610	Processed	Longfin Smelt	53
2011	2	703	Processed	Longfin Smelt	5
2011	2	704	Processed	Longfin Smelt	170
2011	2	705	Processed	Longfin Smelt	26
2011	2	706	Processed	Longfin Smelt	187
2011	2	707	Processed	Longfin Smelt	187
2011	2	711	Processed	Longfin Smelt	8
2011	2	716	Processed	Longfin Smelt	125
2011	2	723	Processed	Longfin Smelt	99
2011	2	723	Processed	Delta Smelt*	1
2011	2	801	Processed	Longfin Smelt	45
2011	2	804	Processed	Longfin Smelt	64
2011	2	809	Processed	Longfin Smelt	113
2011	2	812	Processed	Longfin Smelt	8
2011	2	815	Processed	Longfin Smelt	7
2011	2	901	Processed	Longfin Smelt	32
2011	2	902	Processed	Longfin Smelt	1
2011	2	906	Processed	Longfin Smelt	1
2011	2	910	Processed		No Smelt Catch
2011	2	912	Processed	Longfin Smelt	1
2011	2	914	Processed		No Smelt Catch
2011	2	915	Processed	Longfin Smelt	1
2011	2	918	Processed	Longfin Smelt	1
2011	2	919	Processed	Longfin Smelt	2

SWP ITP Criteria Stations

Processing through 2/3/11

* Adult Delta Smelt (Fork Length = 66 mm)

The Working Group will reconvene on Monday, February 14 at 10am to review the updated flow, turbidity, and other appropriate data.