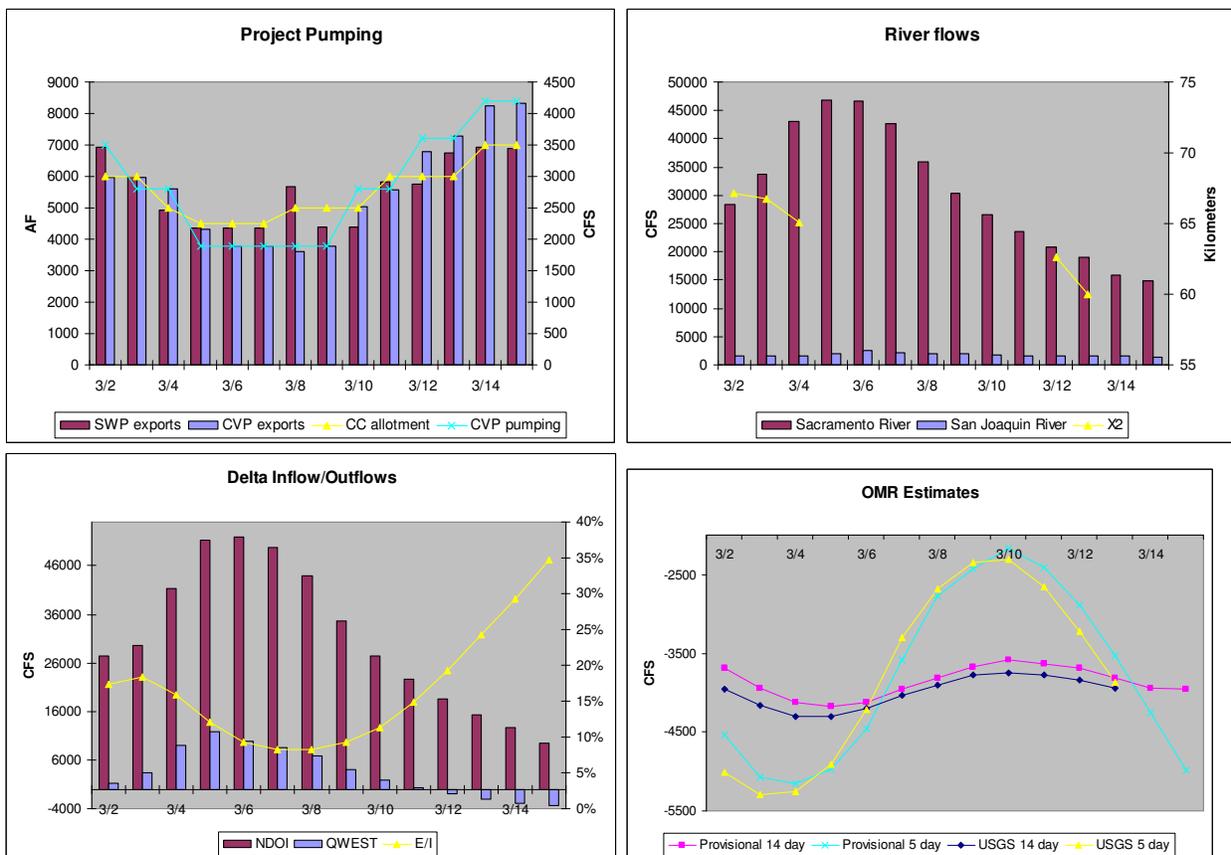


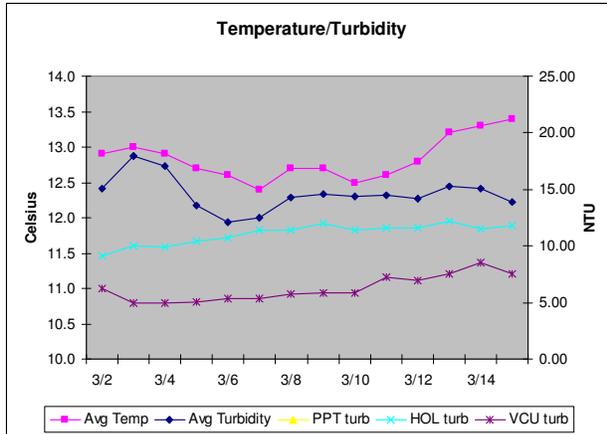
Recommendation for the week of March 16, 2009:

The group recommends to the Service that OMR be set at -5000 cfs on a 14-day average for the next week. The group is monitoring delta smelt salvage and will reconvene and potentially make further recommendations should a one-day, combined expanded salvage reach 20 or greater. The group also recommends that OMR be set at -4000 cfs if salvage of delta smelt occurs on any two consecutive days.

1) Current environmental data.

Temperature for the 3 station average is 13.4 C. The provisional OMR estimate by the projects as of March 15 is -3954 cfs for 14 day average, -4991 cfs for 5 day average. USGS OMR as of March 13 is -3945 cfs 14 day average and -3865 cfs for 5 day average. Sacramento River inflows into the Delta has been decreasing since the peak on March 5 of 46794 cfs and as of March 15 is at 14888 cfs. QWEST has been declining in value as well, with March 15 at -3444 cfs. X2 is at 60 km as of March 13. The data are depicted in the graphs below.





2) Delta fish monitoring:

20mm Survey #1 was completed last week. Samples are processed for all tows for 19 stations, and 22 stations have at least one tow processed. No delta smelt larvae were detected. Sixteen longfin smelt larvae were detected, ranging in size from 6-19mm, in sampling reported from Delta stations only. No station had more than 4 longfin larvae and only single larvae were collected at the 6 central and south Delta stations where longfin smelt were caught. Spring Kodiak Trawl #3 is in the field this week. Results from SKT #3 should be available March 23. Results from previous larval surveys and the SKT are available online at:

<http://www.delta.dfg.ca.gov/data/projects/?ProjectID=SLS>
<http://www.delta.dfg.ca.gov/data/projects/?ProjectID=SKT>.

3) Particle Tracking Modeling

The group requested PTM runs for negative 3000, negative 4000, and negative 5000 cfs OMR flows. Results suggest that at negative 5000 cfs OMR flows, the 30-day entrainment risk for smelt larvae would be 35% at station 812 and 56% for station 815, but the ultimate fates of more than 50% of the particles would still be unaccounted for after 31 days. For negative 4000 and 3000 cfs OMR flows, respectively, the 30-day entrainment risk for smelt larvae would be 26% (11%) for station 812 and 43% (22%) for station 815. The group believes that negative 5000 cfs OMR flows is adequately protective of longfin smelt larvae already in the system, because very few remain in the central and south Delta. .

The group felt that with the current environmental conditions it is likely that delta smelt are spawning. Because newly hatched delta smelt larvae are too small to be captured in the 20 mm survey net or observed in samples at the CVP and SWP fish facilities, larvae may be present but undetected for several weeks after hatching.

Additional discussion focused on the 31-day run duration, and whether the entrainment horizon was too long for SWG weekly advice purposes (i.e., many of the in-Delta particles were destined for entrainment at a longer time step). The group plans to begin discussion of longer-term planning of particle entrainment at the next SWG meeting on March 23.

The group requested PTM modeling for negative 3000, negative 4000, and negative 5000 cfs OMR flows and added flux locations at or near stations 902 and 914 (as both input and output points) for the March 23 group meeting.

4) Salvage

Delta smelt have been salvaged at the CVP on 2-11, 2-15, 3-1, and 3-8 and at the SWP on 3-1, 3-3, and 3-11 for a total expanded salvage of 24. No adult longfin smelt have been salvaged at the SWP or CVP since February 27. Larval longfin smelt were salvaged at the CVP on February 25 and 26 and March 3, 8, and 10, and a single small juvenile on March 10 also.

5) Discussion for Recommendation

With Sacramento River inflows into the Delta at about 15000 cfs, Qwest at about -3400, and X2 currently at about 60 km, the group felt OMR could be held at negative 5000 cfs. However, the group is concerned that with dropping Delta inflows, adult delta smelt could be drawn into the central Delta and salvage could increase over the next few weeks. The group recommends to the Service that OMR be set at negative 5000 cfs on a 14-day average for the next week. This recommendation includes an offramp for increased salvage. Should delta smelt combined expanded salvage occur for two consecutive days, the Projects should set OMR to negative 4000 cfs. Should a one day combined expanded salvage count reach 20 or more delta smelt, the group will reconvene to determine if additional pumping restrictions are appropriate to protect the species.

Longfin Smelt Advice

The group offers no new advice to the Department of Fish and Game regarding actions for longfin smelt. Current delta smelt advice will be protective of longfin smelt larvae, the current life stage of concern.

Recent Smelt Larva Survey (SLS) results and partial 20mm Survey results indicate low and most recently very low densities, respectively, of longfin smelt larvae in the central and south Delta regions influenced by export pumping in the south Delta. These recent results show very few larvae at risk of entrainment. Longfin smelt larvae were transported out of the central Delta and into Suisun Bay by net westward flows in early March. Relatively little additional longfin smelt spawning is anticipated, so entrainment of adult longfin smelt is not expected at OMR flows advised for delta smelt of negative 5000.