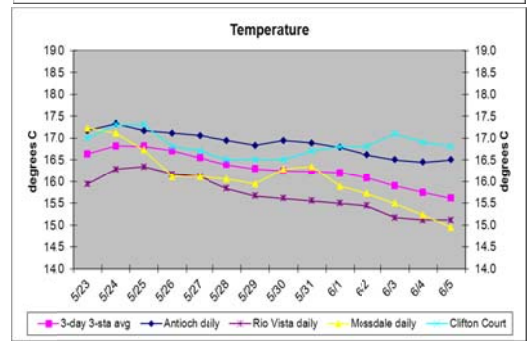
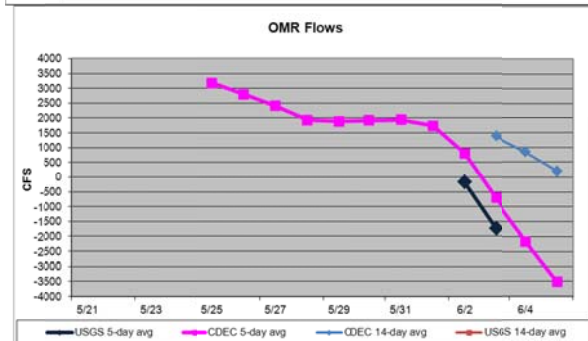
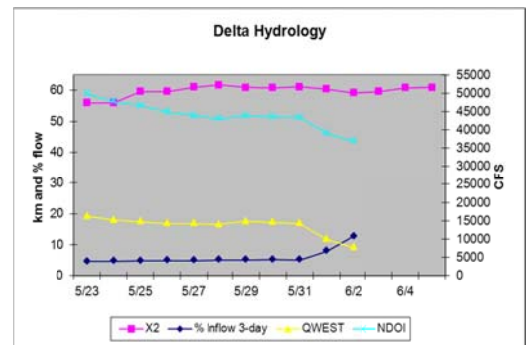
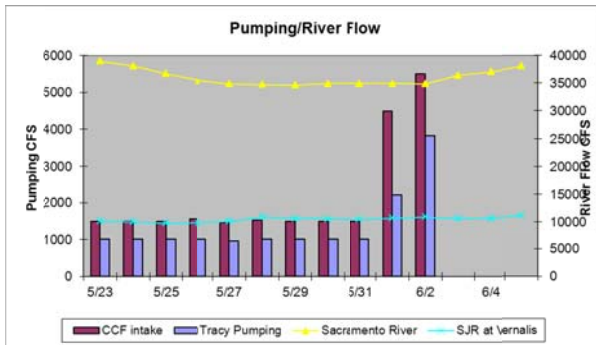


SMELT WORKING GROUP  
Monday, June 06, 2011

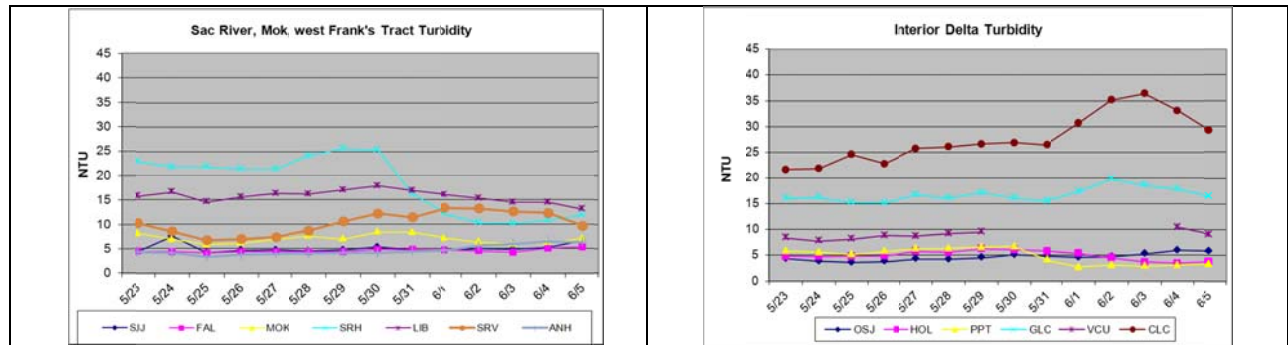
Based on discussion of Delta conditions, and salvage and survey data, the Smelt Working Group determined that risk of delta smelt entrainment is low. The Working Group will monitor salvage data, survey data and hydrological conditions during the week. If delta conditions, salvage, or preliminary 20 mm Survey data from this week show an increased risk of entrainment, the Working Group will reconvene during this week to discuss the potential to modify this determination. No recommendations were made.

1) Current environmental data.

- **Water temperature** for the 3 station average is 15.6°C.
- **OMR** The USGS daily average as of June 3 is -5140cfs and the 5-day average is -1737cfs. The OMR estimate from CDEC as of June 5 is -5547cfs, 5-day is -3515cfs, and 14-day average is 198cfs.
- **Flow** Sacramento River at Freeport is 38,000cfs and Vernalis is 11,000cfs. X2 is just below 61km. The graphs below show the most recent trends in Delta hydrology and water quality that were evaluated by the Working Group.



- **Turbidity** Turbidities are generally at a steady state.



### 2) Delta fish monitoring:

All 20mm samples from Survey #6 (week of 05/23/2011), have been processed. A total of 145 delta smelt were collected on the survey; most were located downstream of the confluence. The only delta smelt collected in the central and south Delta was a single 13mm larva from station 901. 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.dfg.ca.gov/delta/>

### 3) Salvage

No delta smelt >20mm has been salvaged at either the federal or state facilities since last week. No delta smelt have been salvaged since April (CVP). Federal larval fish sampling has found no larval delta smelt as of yesterday (06/05); and state larval fish sampling was not available, but is expected by tomorrow (06/07).

Incidental take for juvenile delta smelt at least 20mm in size is as follows:

	<b>Concern Level</b>	<b>Authorized Take</b>
<b>April</b>	9	13
<b>May</b>	378	567
<b>June</b>	958	1436
<b>July</b>	1086	1630

Numbers are estimated salvage for the SWP and the CVP combined. The monthly numbers are cumulative. For example, the authorized take for July includes the salvage from April, May, and June.

#### 4) Expected Project Operations

CVP Operations: Sacramento River at Keswick is 20,000cfs, and expects to ramp down to 12,750cfs by 06/09; American River 7,000cfs; Stanislaus 2,000cfs; projected operations is at 5 units, and is expected to be reduced to 3 units (3,000 cfs) on Wednesday (06/08) due to b(2) accounting request for Chinook salmon protection.

SWP Operations: Feather River is at 6,000cfs, and is expected to increase this week; Clifton Court 6,000cfs, and will continue to meet -5,000 OMR for the NMFS opinion and will not change pumping to capture flows not exported as result of the CVP pumping reduction later this week.

#### 5) Particle Tracking Modeling

The Working Group did not request 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 2, Action 3 is intended to minimize the entrainment of larval delta smelt. Criteria for the implementation of Action 3 are based upon the onset of spawning or the presence of larvae in the system. Risk of entrainment is estimated based upon survey data, Delta conditions, and the occurrence of salvage.

The Working Group will continue to evaluate the risk of entrainment according to the guidance provided in the RPA, as in previous years. The recent OCAP settlement does not change any of the parameters that the Working Group is required to discuss (B.O., pp 358-368). However, the newly-created Delta Condition Team (DCT) may provide additional information for the Working Group's consideration. The settlement additionally provides that the Service may set OMR flows more negative than -5000 cfs; flows as negative as -6100 cfs are allowed on an experimental basis if the "best available science and consideration of all factors...indicate that such flows would be adequately protective" of delta smelt. This rate of flow could apply if the risk of entrainment is believed to be low, based upon evaluation of physical and biological monitoring results. The Working Group has not as yet received any communication from the DCT.

The 3-day, 3-station average water temperature surpassed 12°C on March 10, two spent female delta smelt were detected in SKT survey #3, and one delta smelt larva was collected during the 20mm Survey #1, any of which meet or exceed the criteria for the implementation of Action 3, entrainment protection for larval smelt. The temperature criterion may indicate that protections are needed based upon the assumption that delta smelt spawning is in progress, whereas the observation of spent females and/or larvae provides direct evidence of spawning. The Working Group noted that the only larva collected from the central and southern Delta in the most recent 20mm Survey was from station 901, on the west side of Franks Tract, and Qwest was strongly

positive at the time (15-16,000 cfs) indicating that other larvae at that location would have been transported west. Given that the apparent distribution exhibited by 20mm Survey #6 was favorable, the Working Group did not feel that this single collection indicated an increased risk of larval delta smelt entrainment. Survey #7 of the 20mm survey commenced today, 06/06/2011.

The Working Group did not receive any advice from the DCT.

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.

Similarly, the lack of young longfin smelt in the central and south Delta indicated very low risk of entrainment for longfin smelt. No modification of Project operations to protect longfin smelt is warranted.

The Working Group will meet again on June 13 at 10:00 am, via conference call; unless assessment of salvage or preliminary larval survey data from this week show presence increased risk of entrainment.