

Smelt Working Group  
December 5, 2016

**Meeting Summary**

The Working Group reviewed present Delta conditions and observed a lack of recent data regarding species distribution. The Working Group did not make a recommendation for OMR flows for the protection of Delta Smelt adults. However, members are concerned regarding today's OMR flow (daily average of approximately -10,000 cfs) and how it could influence the future distribution of the species. The SWG will monitor hydrology conditions and ongoing surveys this week and will reconvene to reassess the risk of entrainment should conditions warrant.

The Working Group is following guidance for entrainment protections from Action 1 (adult Delta Smelt). The Working Group will continue to monitor Delta Smelt survey and salvage data and Delta conditions, and will meet again on Monday, December 12, 2016 at 10 am.

**Reported Data**

1. Current environmental data (data was summarized during the meeting; not distributed prior)

a. Temperature

The 3-station average water temperature for December 4 was 10.6°C.

b. OMR flow

USGS OMR average flow on December 2 was -8,680 cfs. The daily average OMR index value for December 4 was -9,800 cfs and is anticipated to drop to -8,000 cfs by tomorrow. The CDEC daily average OMR flow for December 4 was -9,833 cfs.

c. River flows and pumping

Sacramento River at Freeport flow for December 4 was 15,084 cfs. San Joaquin River at Vernalis river flow for December 4 was 957 cfs. X2 is upstream of 81km. Combined exports are 10,800 cfs today.

2. **Delta fish monitoring**

The FMWT is in the field this week for the December portion of the survey. Results are anticipated later in the month or in early January 2017.

Spring Kodiak Trawl (SKT) #12 is in the field this week.

The Bay Study completed their November survey last week. Two delta smelt were caught in the lower Sacramento River (63 and 67mm). The December survey will be in the field starting tomorrow.

The Enhanced Delta Smelt Monitoring Program (EDSMP) is expected to be in the field as early as December 12, but could be delayed due to permitting issues.

3. **Modeling**

No new PTM runs were distributed to the group this morning for discussion.

4. **Salvage**

No adult Delta Smelt or Longfin Smelt salvage has occurred so far this water year.

## **5. Expected Project Operations**

Jones pumping plant is pumping 4,100 cfs today and will decrease to 2,300 cfs by tomorrow. The daily average intake to Clifton Court (CC) is 6,680 cfs today and is anticipated to remain steady. Combined pumping is 10,800 cfs today and expected to decrease to 9,000 cfs by tomorrow. Pumping is constrained to comply with the SWRCB D-1641 water quality standard for Outflow for the month of December.

## **6. Delta Conditions Team**

No update was given to the SWG regarding DCT.

## **7. Biological Opinion Background:**

RPA, Action 1: Adult Migration and Entrainment

Objective: A fixed duration action to protect pre-spawning adult delta smelt from entrainment during the first flush, and to provide advantageous hydrodynamic conditions early in the migration period.

Action: Limit exports so that the average daily OMR flow is no more negative than -2,000 cfs for a total duration of 14 days, with a 5-day running average no more negative than -2,500 cfs (within 25 percent).

Timing:

Part A: December 1 to December 20 – Based upon an examination of turbidity data from Prisoner’s Point, Holland Cut, and Victoria Canal and salvage data from CVP/SWP (see below), and other parameters important to the protection of delta smelt including, but not limited to, preceding conditions of X2, FMWT, and river flows; the SWG may recommend a start date to the Service. The Service will make the final determination.

Part B: After December 20 – The action will begin if the 3 day average turbidity at Prisoner’s Point, Holland Cut, and Victoria Canal exceeds 12 NTU. However the SWG can recommend a delayed start or interruption based on other conditions such as Delta inflow that may affect vulnerability to entrainment. Part B has associated triggers involving turbidity and/or salvage.

The window for triggering Action 1 concludes when either the temperature criterion is exceeded or there is evidence of spawning. These off-ramp conditions may occur without Action 1 ever being triggered. If this is the case, Action 3 begins, unless the Service concludes on the basis of the totality of available information that Action 2 should be implemented instead.

## **8. Assessment of Risk Discussion**

Members indicated a lack of recent species distribution data. Some surveys are in the field this week and next, while the EDSMP could begin as early as next week, so more data is expected soon. The November FMWT survey detected Delta Smelt at the confluence and lower Sacramento River, and the group indicated that it was likely some portion of the population remains there. Members stressed that Delta Smelt likely are remaining at or close to the X2 position, which appears to be slightly upstream of Antioch.

The SWG expressed concerns regarding the current OMR flow (~-10,000 cfs), but with the expected reduction later in the week to -7,000 to -8,000 cfs, influence of the pumps would be expected to decrease.

A moderate weather system is expected later this week and members expect the precipitation from this event to assist in more positive flows in the central and southern Delta. This event could potentially increase turbidity in some parts of the Delta.

A minority of the membership stated that we do not know what percentage of the population is currently at risk of being entrained; that entrainment into the OMR corridor could be occurring now and we would not know it. This minority indicated OMR should not exceed 5,000 cfs immediately.

The SWG decided that should any Delta Smelt be detected in this week's SKT survey especially in the San Joaquin River and south Delta, members will decide if an additional meeting to reassess the entrainment risk is necessary. However, until such time, the SWG decided that there is insufficient information to support a change in OMR flow at this time.

#### **9. Additional Items**

Service management provided an update on current discussions the regional director is having with stakeholders regarding how to implement the RPAs this water year. A PowerPoint was provided prior to the call and is enclosed as Attachment 1.

Some members suggested that the DWR Turbidity Transect begin field work as soon as the SKT and FMWT surveys were completed. Most SWG members decided to discuss this item at the December 12 meeting, as they did not see sufficient evidence to make a recommendation for a start date at this time.

DWR staff indicated that as part of the NMFS Biological Opinion for the Projects, predator removal activities are expected to be ongoing in the Clifton Court Forebay. DWR requested guidance from the SWG regarding minimizing the chance these activities will result in the detection of Delta Smelt. Members suggested DWR could monitor the SWG notes to see when the species is at greater risk of being drawn down into the south Delta. Other members expressed interest in DWR rapidly distributing catch data to the SWG should these activities result in detecting Delta Smelt. Some members were concerned about how these predator removal efforts might affect salvage operations. DWR stated they will distribute the protocols for this activity. Additional discussion might be forthcoming.

Members requested that the Service redistribute the February 2013 Memo and the December 23, 2015 memo that detail the corrections made to the Incidental Take calculation in the 2008 Biological Opinion. These will be distributed at a later time by email.

The Working Group will continue to monitor conditions and smelt distribution and will meet again on Monday, December 12, 2016.