

PARTICIPANTS

- CDFW
- DWR
- SWRCB
- USBR
- USFWS
- Kearns & West

ACTION ITEMS

- SMT members to monitor conditions and request an additional meeting via email if warranted (e.g., forecasted storms create a turbidity event).
- CDFW to coordinate with DWR on PTM run request.

MEETING SUMMARY

PART 1: Updates on Water Operations and Biological Updates

Relevant Actions & Triggers

USBR shared the triggers that will lead to the First Flush conditions and subsequent onset of OMR management:

- Running three-day average of daily flows at Freeport >25,000 cfs; and
- Running three-day average of daily turbidity at Freeport ≥ 50 NTU¹; or
- Real-time monitoring indicates a high risk of migration and dispersal into areas at high risk of future entrainment.

CDFW noted that Conditions of Approval 8.3.1 (Integrated Early Winter Pulse Protection) and 8.3.3 (Adult Longfin Smelt Entrainment Protection) are in effect as of December 1st, but none of the triggers have been met. Under Condition 8.3.3, CDFW is currently using the November index to determine the salvage trigger; that will be replaced by the annual index once the final FMWT numbers are available. The November index provides a salvage trigger of two fish. The detection of larvae does not eliminate Condition of Approval 8.3.3.

Condition of Approval 8.1.5.2 remains in effect and requires weekly risk assessments be conducted for Delta Smelt and Longfin Smelt.

Condition of Approval 8.4.1 is triggered by the onset of OMR management and terminated with the detection of Longfin Smelt spawning. Given the detection of Longfin Smelt larvae on December 28th, this condition will not be considered this season.

¹ The current instrumentation measures turbidity in FNU's.

Condition of Approval 8.4.2 will come into effect January 1st.

USFWS reported that the Salmon Monitoring Team expects an OMR cap of -5,000 cfs to go into effect on January 1st given that >5% of winter-run Chinook salmon are estimated to be in the Delta.

Current Operations & Outlook

USB and DWR shared operations updates from the Outlook. Their observations included:

- USBR CVO stated that releases on the Sacramento River from Keswick Dam are currently at minimum flows of 3,250 cfs; they do not anticipate changes.
- CVO plans a minor reduction in releases on the American River on January 1st (from 1,250 cfs to 1,185 cfs).
- CVO does not anticipate any changes to releases (200 cfs) on the Stanislaus River from New Melones.
- The Delta Cross-channel Gates will remain closed until mid-May 2021 per the Proposed Action description, and construction activities remain ongoing.
- Jones Pumping Plant exports remain at 800 cfs.
- Feather River releases from Oroville Dam are will decrease from 1,350 cfs to 1,250 cfs today (December 29th).
- Freeport flows are currently 8,200 cfs; DWR anticipates these will decrease slightly over the next few days, though flows could be augmented somewhat by potential rain tomorrow.
- Clifton Court exports are 2,000 cfs today and will decrease to 1,500 cfs tomorrow due to increased salinity.
- DWR reported that Delta outflows are currently 5,000 cfs after several days closer to 4,000 cfs.
- OMR is currently -2,500 cfs and DWR anticipates that it will be -2,000 tomorrow (December 30th).
- QWEST was -2,000 cfs yesterday (December 28th) and will become less negative in the coming days. Precipitation later this week could push QWEST to positive values until exports increase.
- Exports will likely increase next week as rain and receding tides reduce salinity in the Delta.

Review of Environmental Conditions and Survey Updates

CDFW shared survey updates.

- SLS 13 sampled yesterday (December 28th). No Delta Smelt were caught. Three larval Longfin Smelt were collected at Jersey Point (7 mm, with yolk sacs).
- The first SKT of 2021 will sample next week (January 4th – 7th). SLS 1 will sample January 11th – 13th.
- The final FMWT Index is not yet available.
- The Bay Study crew will likely return to sampling in early January.

USFWS reported on EDSM.

- Zero Delta Smelt were detected last week (December 21st – 24th), so there was no abundance estimate generated.
- One Longfin Smelt was detected last week (December 24th) in Suisun Bay (fork length of 74 mm, no expression). Yesterday (December 28th), 16 Longfin Smelt were detected in Suisun Marsh (fork lengths of 65 – 115 mm, no expression).
- EDSM will sample Monday through Thursday this week. Sampling will take places in Suisun Bay and the Sacramento River Shipping Channel strata today (December 29th). All strata will be sampled over the course of the week, though fewer sites will be sampled in some strata due to only two crews sampling instead of three this week.

- The Chipps Island survey crew detected one Longfin Smelt (114 mm) on December 27th. The Chipps Island survey crew will be sampling five days this week.

CDFW provided a salvage update (December 21st to 27th).

- No salvage of Delta Smelt, Longfin Smelt, or any listed species have occurred this water year.
- There were no power outages or stoppage in pumping or salvage counts during this period.

USBR shared water quality data (three-station average daily water temperature as of December 28th was 9.99°C; three-day average flow at Freeport was 8,013 cfs; turbidity was 4.81 FNU) and the seven-day weather forecast for Antioch (mostly sunny to cloudy, WSW winds <7 mph to NNW winds up to 9 mph, a 30% chance of rain on Wednesday (December 30th) and a slight chance of rain through the weekend). QWEST was -1,932 cfs as of December 27th. X2 is >82 km, with estimated X2 for the Sacramento River at 95.7 km and the San Joaquin River at 98.7 km.

PART 2: Open Discussion on Species Status (Structured-Unstructured Time)

SMT members offered perspectives on a series of questions provided for consideration.

- *What life stages are present?*
 - SMT members agreed that only adult Delta Smelt are currently present.
 - For Longfin Smelt, three age classes are now present: adults in the spawning size range (i.e., >85 mm), subadults (<85 mm), and larvae.
 - CDFW noted that while they use 85 mm as a threshold for identifying which fish are in the spawning size range, there is some evidence indicating Longfin Smelt can spawn when <85 mm.
- *What distribution data is available? If no data is available, what abiotic factors can predict distribution? What abiotic factors are relevant? Are conditions in Central/South Delta conducive to DS or LFS presence? Have changes in abiotic factors increased or decreased risk of entrainment?*
 - USBR observed that for Delta Smelt, conditions are unchanged since last week, other than progressing through the season.
 - CDFW stated that Longfin Smelt distribution is following expected patterns. SLS 13 was well-timed to catch the beginning of hatching and SLS 1 should provide a better sense of larval distribution.
 - CDFW recommended SMT members continue to monitor turbidity following potential storm events and request an additional meeting via email if warranted.

PART 3: Live-edit Assessments

Proposed Action Weekly Evaluation of Delta Smelt, including Distribution, Abiotic Conditions, Risk Assessment Questions, and Executive Summary

The group reviewed the two relevant assessment questions: (1) Between December 1 and January 31, has any first flush condition been exceeded? And (2) Do Delta Smelt have a high risk of migration and dispersal into areas at high risk of future entrainment? There were no significant changes to the proposed language.

Given that conditions are similar to last week, i.e., there is some rain in the forecast and no recent detection data, the group agreed that no changes to the Executive Summary were needed.

No non-consensus issues were identified.

ITP Longfin Smelt Risk Assessment

CDFW noted they updated the Longfin Smelt life stages present to include larvae as well as adults.

CDFW updated the Executive Summary for Longfin Smelt to include the survey data indicating larvae are present in the lower San Joaquin River. In addition, CDFW will request a particle tracking model (PTM) to inform the risk of entrainment.

The group agreed that the risk of entrainment for Delta Smelt in the central Delta is low and has not changed since the previous week.

For Longfin Smelt, CDFW suggested a slight increase in entrainment risk since last week due to the onset of hatching in the lower San Joaquin River, but overall risk remains at most moderate for the projected range of OMR levels.

- The group agreed that advice was not warranted.
- CDFW commented that if larvae were present in the OMR corridor, the risk of entrainment would be high.
- The group agreed to clarify the risk for adults versus larvae in the OMR corridor: Moderate for fish in OMR corridor (for *adults* in proximity to Bacon Island, the risk is moderate. *If larvae were present in the OMR corridor risk of entrainment is high, however, no larvae have been detected upstream of Jersey Point.* For fish of *all life stages* in the main-stem San Joaquin River *near Jersey Point*, an OMRI of -5,000 cfs is considered protective).

CDFW will update the discussion of conditions of approval to note that Condition of Approval 8.4.1 was terminated after spawning of Longfin Smelt was detected on December 28th.

DWR confirmed that the tidal cycle was shifting to a period of reduced magnitude, which could result in slight freshening of the Delta.

There were no items to elevate to WOMT with regards to Longfin Smelt.

USBR reviewed the language in the Outlook describing the state of Longfin Smelt. The group agreed to remove the reference to spent females detected in the South Bay and the absence of Longfin Smelt in the central and south Delta and instead note that three larvae were detected at Jersey Point and spawning and hatching are now underway.

Additional Considerations/Discussion

CDFW explained that in response to the detection of Longfin Smelt larvae in the lower San Joaquin River, they will request DWR run a PTM using the two scenarios outlined in the ITP Risk Assessment.

CDFW proposed the following model inputs and asked the group for feedback:

- Hydrologic conditions:
 - Current operations; and
 - OMR of -5,000 cfs
- Insertion points:
 - Station 809 (near Jersey Point, i.e., where larvae were detected);
 - Station 902 (upstream of Franks Tract); and

- Station 815 (Prisoner's Point)

CDFW noted that last year's PTM run used Stations 809, 815, and 901.

- USFWS, USBR, and CDFW recommended using 902 rather than 901 to better assess larval risk in the OMR corridor.
- DWR emphasized that Station 809 is the only station informed by monitoring. The other two stations were selected based on historical patterns and professional judgement, rather than detection of larvae.

DWR asked for clarification regarding the -5,000 cfs OMR scenario, noting these conditions would assume a significant precipitation event, exports of ~-5,500 cfs, and Delta outflows of ~10,000 cfs.

- CDFW asked if these conditions were realistic.
- DWR confirmed that one inch of rain can yield outflows of 10,000 cfs.
- CDFW explained that they would like to evaluate the upper end of possible conditions.

DWR noted new First Flush conditions are in effect this year and asked if the group thought it would be possible to reach an OMR of -5,000 without triggering First Flush.

- DWR indicated Freeport flows would likely need to reach 12,000 – 15,000 to trigger First Flush. Therefore, the PTM run will not represent First Flush export reduction.
- CDFW confirmed they would keep this in mind when interpreting the results.

CDFW acknowledged that unless OMR is expected to change significantly, this is not a critical PTM run. If DWR needs additional notice to complete the run, CDFW can submit an updated request after the next SMT meeting.