

## PARTICIPANTS

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

## ACTION ITEMS

- SMT members to monitor conditions and request an additional meeting via email if warranted (e.g., OMR exceeds -4,000 cfs).

## MEETING SUMMARY

### Agenda Review, Logistics, & Housekeeping

CDFW noted that the ITP Risk Assessments are now available on the CDFW Water Branch webpage: [wildlife.ca.gov/Conservation/Watersheds/Water-Operations](http://wildlife.ca.gov/Conservation/Watersheds/Water-Operations).

### 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  $\geq 50$  NTU<sup>1</sup>; 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 1<sup>st</sup>, but none of the triggers have been met.

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

#### Current Operations & Outlook

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

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<sup>1</sup> The current instrumentation measures turbidity in FNU's.

- USBR CVO noted that they anticipate a 100 cfs reduction to releases on the Sacramento River from Keswick Dam on Thursday (December 17<sup>th</sup>), from 3,500 cfs to 3,400 cfs.
- CVO did not anticipate any changes in releases (1,250 cfs) on the American River from Nimbus Dam in December.
- The Delta Cross-channel Gates remain closed and are anticipated to remain closed until mid-May 2021 per the Proposed Action description.
- Jones Pumping Plant will take advantage of opportunities to increase exports above the current rate (800 cfs) if Delta water quality conditions allow.
- Delta water quality continues to control export operations.
- Feather River releases from Oroville Dam are currently 1,650 cfs, with possible decreases to 1,250 cfs.
- Freeport flows were 8,900 cfs as of December 14<sup>th</sup>. This will likely increase by a couple hundred cfs after this week's precipitation event, then return to ~8,000 cfs as rain runoff subsides.
- Minimal changes in flow are anticipated for the San Joaquin River (currently 1,000 cfs) in response to the recent precipitation events.
- Delta exports will likely increase if Delta conditions "freshen" after astronomical King high tides recede later this week and the predicted rainfall event occurs on Wednesday and Thursday.
- OMR is currently -1,500 cfs and will become more negative if exports increase in response to better water quality conditions in the Delta.
- QWEST has increased to 5,000 cfs due to recent rainfall, but in five days this will likely drop to near negative values as precipitation influenced inflows diminish.

## Review of Environmental Conditions and Survey Updates

CDFW shared survey updates.

- SLS started yesterday (December 14<sup>th</sup>), sampling six stations in the south Delta. The remaining six stations will be sampled today (December 15<sup>th</sup>). No Delta Smelt or Longfin Smelt were collected.
- The Bay Study was shortened from ten days to two days this month due to equipment and COVID-19 complications. The survey sampled the Lower San Joaquin River and no Delta Smelt or Longfin Smelt were collected.
- The December FMWT will finish today. Zero Delta Smelt have been detected so far. Preliminary reports indicate two additional Longfin Smelt were captured last week, one near Chipps Island and one in the lower Sacramento River. Fork length and station numbers were not yet available.

USFWS reported on EDSM.

- Zero Delta Smelt were detected last week (December 7<sup>th</sup> to 11<sup>th</sup>), so there was no abundance estimate generated.
- EDSM will sample Monday through Thursday this week; no Delta Smelt have been detected thus far. Zero Longfin Smelt were detected last week and none have been detected so far this week.
- Six Longfin Smelt and zero Delta Smelt were detected last week (December 8<sup>th</sup> and 9<sup>th</sup>) in the Chipps Island Trawl. The Longfin Smelt fork lengths were: 68, 69, 74, 105, 107, and 114 mm. The Chipps Island survey crew will be off the water this week.
  - CDFW observed that the fork lengths point to the presence of two age classes.
  - USFWS reported that the Chipps Island Trawl is on a biweekly schedule and will reassess COVID risks every two weeks. NMFS intends to raise the potential disruptions to the Chipps Island Trawl schedule to WOMT, as this is a key sampling site for both smelt and salmonid species.
- USFWS reported that the south Delta stratum was not sampled last week.

CDFW provided a salvage update (December 7<sup>th</sup> to 13<sup>th</sup>).

- No salvage of Delta Smelt or Longfin Smelt occurred during the period of reporting.
- There were no power outages or stoppage in pumping or salvage counts during this period.

CDFW shared that the UC Davis Otolith and Geochemistry Laboratory detected ripe and spent Longfin Smelt in south San Francisco Bay (number of fish and fork lengths not available), which suggests spawning is likely happening in the Delta as well.

DWR reported that seven Longfin Smelt were detected in the lower Sacramento River between mid-November and December 8<sup>th</sup> in the FCCL broodstock collections (5 total days of sampling). Most fish were one-year-olds, with a few two-year-old fish. Zero Delta Smelt were collected.

USBR shared water quality data (three-station average daily water temperature as of December 14<sup>th</sup> was 10.49°C; three-day average flow at Freeport was 8,053 cfs; turbidity was 3.46 FNU) and the seven-day weather forecast for Antioch (sunny to cloudy with a 90% chance of rain Wednesday (December 16<sup>th</sup>), a 30% chance of rain Thursday (December 17<sup>th</sup>) (0.1 to 0.25-inches of total precipitation), and SSW and ESE winds <8 mph and in the next seven days). QWEST was 1,393 cfs as of December 14<sup>th</sup>. X2 is >82 km, with estimated X2 for the Sacramento River at 94 km and the San Joaquin River at 96 km.

CDFW noted that the Delta Turbidity Conditions Report indicates conditions in the south Delta are fairly clear.

## 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, the group agreed that age 1 and age 2 fish are present and the presence of spawning fish in the south San Francisco Bay indicates Longfin Smelt are in spawning condition in the upper estuary even if spawning adults have yet to be detected in this region.
- *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 it has been >30 days since the last detected Delta Smelt, therefore recent detection data is not available.
    - CDFW noted that historically, Delta Smelt are more likely to migrate later in the season (i.e., March) in the absence of a first flush.
    - USFWS agreed that Delta Smelt will migrate without a first flush, and noted that in January, February, and March, the location of Delta Smelt does not seem to be correlated with X2. This is likely because Delta Smelt have already moved upstream. However, data suggests that the distribution of Longfin Smelt during the Spring Kodiak Trawl indicates that greater X2 values are associated with Longfin Smelt moving farther upstream.
  - USBR asked if small precipitation events this early in the season were likely to lead to Delta Smelt migration.
    - USFWS suggested there was a marginal increase in the likelihood of movement upstream due to recent and forecast small rain events.

- CDFW pointed out that temperature would be another important factor to consider at this point in the season, and the relatively cold water temperatures do not support migration at this time.
  - DWR agreed and noted turbidity is low, which also indicates migration has yet to begin.
- CDFW noted that migration and spawning of Longfin Smelt appears to be underway. This may slightly increase the risk of entrainment, but not enough to trigger advice to WOMT. They acknowledged that identifying the threshold between low and high risk was challenging for both species.
  - DWR observed that even if Longfin Smelt are moving into the San Joaquin River, OMR values are not sufficient to entrain fish in the mainstem San Joaquin River.

### PART 3: Live-edit Assessments

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

USBR suggested revising estimated X2 from 90 km to 95 km. The group agreed.

The group discussed whether to include language indicating the small predicted precipitation events might lead to migration of Delta Smelt. USFWS suggested removing this language based on the discussion in Part 2 and SMT members agreed.

Next, 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?

SMT members provided comments on the second assessment question:

- The group discussed anticipated changes to QWEST over the next seven days. DWR explained that operations are currently highly variable. While QWEST will be close to 5,000 cfs for the next three days, it will then ramp down to negative. The amount of precipitation in the next storm will determine how negative QWEST becomes later in the week.
- SMT members also discussed the anticipated OMR range for the upcoming week. DWR noted that OMR could reach -5,000 cfs with sufficient precipitation, but additional precipitation events would be required to sustain an OMR value of -5,000 cfs.
- USFWS asked if any salmon protection actions might come into play in the coming weeks.
  - NMFS explained that protections are not currently anticipated, but additional data is needed to determine where the fish are located.
- The group agreed to remove language related to potential movement in response to precipitation events from this question. USFWS reasoned that risk of entrainment is elevated compared to last week but overall risk of entrainment is not high.

The group agreed to include language in the executive summary echoing USFWS's observation: risk is slightly elevated in comparison to last week, but still low overall due to the range of potential OMR values.

No non-consensus issues were identified.

## **ITP Longfin Smelt Risk Assessment**

CDFW stated that they plan to replicate the Delta Smelt executive summary from the Proposed Action Assessment. There were no concerns voiced.

For Longfin Smelt, CDFW recommended stating that while risk is low overall, risk of entrainment is elevated slightly due to the broad range of potential OMR values and evidence that Longfin Smelt are migrating upstream and spawning has occurred elsewhere in the region (south San Francisco Bay).

- The group agreed to categorize risk for two OMR export scenarios: low risk at -1,500 cfs (current OMR) and moderate risk for Longfin Smelt to Bacon Island at -5,000 cfs. DWR noted that -5,000 cfs is protective for fish in the mainstem San Joaquin River.

SMT members agreed that if OMR exceeds -4,000 cfs before next Tuesday (December 22<sup>nd</sup>) the group would initiate a discussion via email to consider convening an interim meeting.

The group discussed the exposure and routing risk for Longfin Smelt in the confluence.

- CDFW suggested that given the positive QWEST values this week, the projected range of OMR values would likely not pull migrating Longfin Smelt into the south Delta.
- DWR noted that geographic specificity could be helpful, as risk would vary for fish at the confluence versus fish already in the San Joaquin River.
- The group agreed the exposure and routing risk should remain low.

USFWS asked what indicators would initiate requests for particle tracking models. CDFW confirmed these requests would be based on detection of adult Longfin Smelt in the San Joaquin River or central Delta or the results from SLS.

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

## **Additional Considerations/Discussion**

There were no additional considerations.