PARTICIPANTS

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

ACTION ITEMS

• DWR to proceed with the requested PTM run.

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 or a spent delta smelt has been collected in monitoring surveys.

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 now using the 2020 annual index based on the FMWT (28) to determine the salvage threshold (3 Longfin Smelt). The detection of larvae does not eliminate Condition of Approval 8.3.3. CDFW noted that the FMWT did not collect any Delta Smelt, so the annual index for Delta Smelt is zero for the third consecutive year.

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.

Condition of Approval 8.4.2 came into effect January 1st and will be active through June 30th or until the temperature offramp occurs. It will be triggered if:

Smelt Monitoring Team

¹ The current instrumentation measures turbidity in FNUs.

- Longfin Smelt larvae or juveniles are found in four or more of the 12 SLS or 20 mm stations in the central or south Delta,
- Or Longfin Smelt catch per tow exceeds five larvae or juveniles in two or more of the 12 stations in the central or south Delta.

If triggered, it will restrict South Delta exports for seven consecutive days in order to maintain a seven-day average OMR index no more negative than -5000 cfs. None of the triggers have been met.

NMFS reported that OMR management was initiated as of January 1st, because the Salmon Monitoring Team (SaMT) had determined that >5% of the population of winter-run Chinook salmon were in the Delta on that date, and thus met the requirements under the PA to initiate OMR management. In addition, the SaMT estimated that more than 5% of the spring-run Chinook salmon and California Central Valley steelhead populations are in the Delta at this time.

Current Operations & Outlook

USBR 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. There will be increased river flows due to accretions into the mainstem Sacramento River from the precipitation on Monday January 5th, which will begin to make their way down to the Delta.
- American River releases from Nimbus Dam are at 1,185 cfs, and CVO does not anticipate changes.
- Releases from Goodwin Dam on the Stanislaus River are currently at 200 cfs. Changes in releases in
 order to create instability flow pulses, ranging from 200 cfs to ~1,000 cfs, are planned for later this
 week (Thursday and Friday).
- CVO reported that Freeport flows are slightly less than were expected in response to recent rain events. (ranging from 7,500 to 11,000 cfs this week) There could be more precipitation this week on Wednesday, Thursday, or Friday, which could increase river flows. DWR reported that current flows are 7,700 cfs at Freeport.
- Jones Pumping Plant exports remain at 800 cfs, though USBR could increase pumping to 1,800 cfs if water quality conditions in the Delta improve and support the additional exports. Water quality conditions are slightly improved this week due to the neap tidal cycle, but are anticipated to be less favorable next week with the onset of the spring tidal cycle, which will peak January 11-13.
- The Delta Cross-channel Gates are currently closed and are not expected to open for any water quality requirements this month; construction activities on the gates remain ongoing. DCC gates will remain closed until mid-May per the PA and D-1641 criteria.
- Feather River releases are at 1,250 cfs with no anticipated changes.
- Clifton Court exports are 2,000 cfs today; they do not anticipate increases in exports due to salinity conditions in the western Delta. Currently, Jersey Point salinity levels, which affect Contra Costa Water District intakes, is the controlling water quality factor.
- DWR reported that Delta outflows are currently 5,400 cfs and will increase over the next few days to 7,400 cfs.
- The OMR index is currently -2,400 cfs, and DWR anticipates that it will remain stable this week. The OMR index, as of January 2nd, was -1,989 cfs.
- QWEST is -500 cfs and will become less negative (-100 to -400) in the coming days.
- State storage in San Luis Reservoir was 590 TAF.

Review of Environmental Conditions and Survey Updates

CDFW shared survey updates.

- SLS 1 will start next Monday, January 11.
- The first SKT of 2021 will start sampling today (January 5th) and will provide results next Monday, January 11.
- It is undecided whether the Bay Study will sample this month as their boat is being repaired.

USFWS reported on EDSM.

- Zero Delta Smelt were detected last week (December 28th 31st), so there was no abundance estimate generated. EDSM sampling is happening Monday through Friday this week.
- Sixteen Longfin Smelt were detected last week (December 28th) in Suisun Marsh. Yesterday (January 4th), 6 Longfin Smelt were detected in Suisun Marsh (fork length of 59 mm to 82 mm, no expression).
- The Chipps Island survey crew detected one Longfin Smelt (107 mm) on January 4th. It was not checked for expression since it was being transferred to FCCL.
- DWR also reported that the FCCL Delta Smelt Broodstock Collection team did 1-2 days of sampling last week and did not capture any Delta Smelt. Generally, broodstock collection continues until the time when wild spawning is possible (generally early February), since they want fish to be acclimated to the hatchery before they enter spawning condition.

CDFW provided a salvage update (December 28thst to January 1st).

- No salvage of Delta Smelt, Longfin Smelt, or any listed species.
- 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 January 4th was 10.04°C; three-day average flow at Freeport was 7,824 cfs; turbidity was 5.32 FNU) and the seven-day weather forecast for Antioch (sunny to mostly cloudy, NNW winds up to 5 mph, and a 20-30% chance of rain on Wednesday, Thursday, and Friday – all less than 1/10 inch per day. QWEST will range from -100 to -400 cfs (-457 on January 4th and forecasted to be -100 on January 7th). X2 is >82 km, with estimated X2 for the Sacramento River at 93.7 km and the San Joaquin River at 95.2 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?
 - \circ $\;$ 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.
- 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?
 - CDFW noted that the bulk of age 1 and adult Longfin Smelt detected this season have been in Suisun Marsh and expression has not been reported in those fish. They might be staging in Suisun Marsh and potentially making future runs into the Delta to spawn, or they could be immature fish that are remaining in the estuary for the winter. Spawning usually continues through February, so CDFW expects to see more migrating into the Delta soon.

 DWR observed that most of the Longfin Smelt observed by EDSM were in the 70 to 80 mm size range, which suggests they are probably 1 year old fish. CDFW noted that there is some evidence that Longfin Smelt can spawn at sizes down to 65 mm, but without staging the fish it is impossible to know their status for certain. They can only rely on the EDSM expression check, which has not reported any fish expressing gametes. CDFW would expect some of the larger fish to be sexually mature.

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 a small amount of 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 reviewed the ITP Risk Assessment, including updated language, which was largely restricted to the environmental updates, survey data, and relevant actions and triggers discussed above.

For Longfin Smelt, CDFW noted that the OMR is projected to be stable this week, so they suggested keeping the assessment of risk levels the same as last week.

- The group agreed that advice was not warranted.
- The group agreed to update the language to clarify that risk is similar to last week when the onset of hatching in the Lower San Joaquin River exposed larvae to entrainment at OMR flows more negative than -5000 cfs.

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

Additional Considerations/Discussion

The PTM request discussed at last week's SMT meeting was delayed, so CDFW reiterated the request and asked if SMT members would like to change any of the parameters discussed at that time.

- USFWS asked whether they should change the lower OMR scenario to -2,500 cfs since that may better reflect this week's range of potential operations.
- DWR asked whether the intent of the modeling was to understand the range of hydrology or make a recommendation.
- CDFW described their intention as capturing the potential range of OMR indices and to track the fate of these particles throughout the season.
- Members agreed on -2,500 cfs as a more realistic representation of the this week's operations.

The group requested a PTM run with the following parameters:

• Hydrologic condition scenarios:

- OMR of -2,500 cfs
- OMR of -5,000 cfs
- Insertion points:
 - Station 809 (near Jersey Point, i.e., where Longfin Smelt larvae were detected);
 - Station 902 (upstream of Franks Tract); and
 - Station 815 (Prisoner's Point)