

PARTICIPANTS

- California Department of Fish and Wildlife (CDFW)
- California Department of Water Resources (DWR)
- National Marine Fisheries Service (NMFS)
- State Water Resources Control Board (SWRCB)
- U.S. Bureau of Reclamation (USBR)
- U.S. Fish and Wildlife Service (USFWS)
- Kearns & West (KW)

ACTION ITEMS

- CDFW to request an update on the September and October Fall Midwater Trawl (FMWT) indices.

MEETING SUMMARY

PART 1: Updates on Water Operations and Biological Updates

Relevant Actions & Triggers

USBR reported on anticipated Old and Middle River (OMR) management measures. At this point there are no controlling actions set for the region. The first one will be the Integrated Early Winter Pulse Protection action, and this cannot be initiated until December 1, 2021. CDFW reported on the Incidental Take Permit (ITP) Conditions of Approval that are currently in effect. Currently only 8.1.5.2 is in effect requiring SMT to conduct a risk assessment. Integrated Early Winter Pulse Protection (8.3.1) and Adult Longfin Smelt Entrainment Protection (8.3.3) can be initiated as of December 1st.

Proposed Action

OMR Management Measures	Requirement	Time Frame	Trigger	Triggered?
Integrated Early Winter Pulse Protection (“First Flush” Turbidity Event)	Reduce exports for 14 consecutive days so that the 14-day averaged OMR index for the period shall not be more negative than -2,000 cfs	Dec 1 to Jan 31	(1) Running three-day average of daily flows at Freeport >25,000 cfs; and (2) Running three-day average of daily turbidity at Freeport ≥50 Nephelometric Turbidity Units (NTU ¹); or (3) Real-time monitoring indicates a high risk of migration and dispersal into areas at high risk of future entrainment or a spent delta smelt (DS) has been collected in monitoring surveys.	Not active

¹ The current instrumentation measures turbidity in Formazin Nephelometric Units (FNU).

OMR Management Measures	Requirement	Time Frame	Trigger	Triggered?
OMR Management	Manage to a more positive OMR than -5,000 cfs	From the onset of OMR management to the end		Not active
Turbidity Bridge Avoidance (“South Delta Turbidity”)	If the daily average turbidity at Bacon Island cannot be maintained less than 12 NTU, manage exports to achieve an OMR no more negative than -2,000 cfs until the daily average turbidity at Bacon Island drops below 12 NTU.	After the first flush or Feb 1 (whichever comes first) and until a ripe or spent female is detected or April 1 (whichever is first)	Average daily turbidity in Old River at Bacon Island (OBI) at a level of more than 12 NTU.	Not active
Larval and Juvenile Delta Smelt	Run hydrodynamic models and forecasts of entrainment, informed by the EDSM or other relevant survey data to estimate the percentage of larval and juvenile delta smelt that could be entrained. If necessary, manage exports to limit entrainment to be protective based on the modeled recruitment levels.	On or after March 15 of each year until off-ramp criteria are met	If QWEST is negative AND larval or juvenile delta smelt are within the entrainment zone of the pumps based on real-time sampling of spawning adults or young of year life stages	Not active
End of OMR Management	OMR criteria may control operations until June 30 (for Delta Smelt and Chinook salmon), until June 15 (for steelhead/rainbow trout), or when the species-specific off ramps have occurred, whichever is earlier.	During OMR management to June 30, or when the DS temperature off ramp has been reached.	DS: when the daily mean water temperature at Clifton Court Forebay reaches 77°F for 3 consecutive days	Not active

ITP Conditions of Approval

Condition of Approval	Requirement	Time Frame	Trigger	Triggered?
8.1.5.2 (Smelt Monitoring Team Risk Assessment) Triggered	Outlines contents for weekly risk assessments of Delta Smelt and Longfin Smelt (LFS) required under 8.1.5 and 8.1.1	Nov 1 st through June 30 th or until off-ramped by 8.8		Yes
8.3.1 (Integrated Early Winter Pulse Protection)	Reduce south Delta exports for 14 consecutive days to maintain a 14-day average OMR index no more negative than -2,000 cfs, and convene the Smelt Monitoring Team within one day of triggering. After maintaining a 14-day average OMR index no more negative than -2,000 cfs for 14 days, Permittee shall maintain a 14-day average OMR index no more negative than -5,000 cfs, initiating the OMR Management season.	Dec 1 to Jan 31	Three day running average daily flows at Freeport greater than, or equal to, 25,000 cfs, AND Three day running average of daily turbidity at Freeport is greater than, or equal to, 50 FNU OR The Smelt Monitoring Team determines that real-time monitoring of abiotic and biotic factors indicates a high risk of DS migration and dispersal into areas at high risk of future entrainment.	Not active
8.3.3 (Adult Longfin Smelt Entrainment Protection)	After December 1, if an Integrated Early Winter Pulse Protection (Condition of Approval 8.3.1) has not yet initiated, Permittee shall reduce south Delta exports to maintain a 14-day average OMR index no more negative than -5,000 cfs and initiate OMR Management if: Cumulative expanded salvage, Dec 1 st through Feb 28 th , exceeds most recent FMWT Index divided by 10, or SMT determines that there is a high risk of entrainment.	Dec 1 through Feb 28 th	Salvage threshold for WY 2022 is TBD.	Not active

Condition of Approval	Requirement	Time Frame	Trigger	Triggered?
8.4.1 (OMR Management for Adult Longfin Smelt)	<p>The SMT shall conduct weekly risk assessments and decide whether to recommend and OMR flow requirement to minimize entrainment of adult LFS. The SMT may provide advice to restrict south Delta exports for seven consecutive days to achieve a seven day-average OMR index within three risk categories:</p> <p>Low risk: OMR between -4,000 cfs to -5,000 cfs Medium risk: OMR between -2,500 cfs to -4,000 cfs High risk: OMR between -1,250 cfs to -2,500 cfs</p>	Onset of OMR management through Feb 28 th	SMT recommendation based on weekly risk assessment	Not active
8.4.2 (Larval and Juvenile Longfin Smelt Entrainment Protection)	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 -5,000 cfs and convene the SMT to recommend an OMR flow limit between -1,250 and -5,000 cfs.	January 1st through June 30th or until the temperature offramp occurs	(1) Longfin Smelt larvae or juveniles are found in four or more of the 12 Smelt Larval Survey (SLS) or 20 mm stations in the central or south Delta, Or (2) Longfin Smelt catch per tow exceeds five larvae or juveniles in two or more of the 12 stations in the central or south Delta. The relevant stations are: 809, 812, 815, 901, 902, 906, 910, 912, 914, 915, 918 and 919	Not active

Condition of Approval	Requirement	Time Frame	Trigger	Triggered?
8.4.3 High flow offramp for Longfin Smelt	If triggered, Conditions of Approval 8.4.1 and 8.4.2 are not required or would cease if previously required.	Throughout OMR management	When river flows are (a) greater than 55,000 cfs in the Sacramento River at Rio Vista or (b) greater than 8,000 cfs in the San Joaquin River at Vernalis. If flows subsequently drop below 40,000 cfs in the Sacramento River at Rio Vista or below 5,000 cfs in the San Joaquin River at Vernalis, the OMR limit previously required as a part of Conditions of Approval 8.4.1 and 8.4.2 shall resume.	Not active
8.5.1 Turbidity Bridge Avoidance	maintain daily average turbidity in Old River at Bacon Island (OBI) at a level of less than 12 NTU. If the daily average turbidity at OBI is greater than 12 NTU, Permittee shall restrict south Delta exports to achieve an OMR flow that is no more negative than -2,000 cfs until the daily average turbidity at OBI is less than 12 NTU.	After the first flush or Feb 1 until end of OMR management or until CDFW is in agreement that the action may be ended or modified.	Turbidity at OBI > 12 FNU	Not active

Condition of Approval	Requirement	Time Frame	Trigger	Triggered?
8.5.2 (Larval and Juvenile Delta Smelt Protection)	If triggered, this Condition of Approval will restrict south Delta exports for seven consecutive days in order to maintain a seven-day average OMR index no more negative than -5,000 cfs and SMT members will meet to assess the risk of entrainment. The SMT may provide further advice to restrict exports in order to maintain an OMR index more positive than -5,000 cfs. In their assessment, SMT members will determine if risk of entrainment is low, medium, or high; subsequent OMR restrictions will be based on level of risk. Furthermore, if salvage of Delta Smelt exceeds 11 in three days, this Condition of Approval will restrict south Delta exports for seven consecutive days in order to maintain a seven-day average OMR index no more negative than -3,500 cfs.	Nov 1 st through June 30 th or until off-ramped by 8.8	When the five-day salvage of juvenile Delta Smelt is greater than or equal to one plus the average prior three years' FMWT index (rounded down). The 2021 FMWT index for Delta Smelt is not yet available.	Active, not triggered
8.8 (End of OMR Management)	If triggered, OMR Management would be off-ramped for Longfin and Delta Smelt.	From the onset of OMR management through June 30 th	Daily mean water temperature at Clifton Court Forebay is >25° C for three consecutive days.	Not active
8.12 (Barker Slough Pumping Plant Longfin and Delta Smelt Protection)	Barker Slough Pumping Plant will reduce exports so the maximum 7-day average is <60 cfs.	From January 15 through March 31 in dry and critical water years for Longfin Smelt, and from March 1 st through June 30 th for Delta Smelt	Larval Smelt are detected at SLS Station 716 during the period identified for each species, and/or when recommended by the SMT	Not active

Current Operations & Outlook

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

- USBR Central Valley Office (CVO) reported that there will be a slight chance of precipitation late Thursday into Friday. The weather pattern will then favor drier conditions for the next couple weeks.

- Releases from Whiskeytown Dam on Clear Creek are currently 200 cfs. No modifications expected.
- Releases on the Sacramento River from Keswick Dam are currently 3,250 cfs. No modifications expected.
- American River releases from Nimbus Dam are holding at 550 cfs. No modifications expected.
- Releases from Goodwin Dam on the Stanislaus River are currently 200 cfs. No modifications expected.
- Freeport flows into the Delta are stable ranging from 7,000 to 10,000 cfs.
- Jones Pumping Plant exports are currently 4,200 cfs and will decline to 2,700 cfs by November 17th in response to reduced Delta inflows.
- Delta Cross-channel (DCC) gates are currently closed after the Knights Landing index was triggered on November 13th. The gates may be reopened on or after the 18th after further monitoring.
- There were various changes in the operations of exports last week due to aquatic debris accumulation on the trash racks. The recent influx of aquatic debris is being attributed to the recent barrier removals.
- DWR reported that Feather River releases are currently at 950 cfs and expected to hold for the near future.
- Freeport flows peaked on November 12th at just over 13,600 cfs and decreased to 8,800 cfs on November 15th. Further decreases are expected over the coming week.
- San Joaquin River flows at Vernalis were 600 cfs on November 15th and are anticipated to stay steady.
- Clifton Court Forebay inflows peaked around 6,000 cfs over the weekend and decreased to 1,000 cfs on November 16th. Inflows are anticipated to decrease to 300 cfs in the coming days.
- Delta outflows as of November 16th are 3,300 cfs. Operations are targeting a monthly average of 3,500 cfs per D-1641 requirements. Outflows are currently controlling operations; the E:I ratio briefly limited exports over the weekend.
- X2 is currently upstream of the confluence.
- QWEST is currently near -3,000 cfs and will become more positive over the week as exports decrease.
- The Grant Line barrier was breached on November 13th, which changed the OMT Index equation. The OMR Index was near -5,400 cfs on November 15th and will trend more positive over the next couple days. The OMR Index is expected to reach between -2,000 and -4,000 cfs depending on Freeport flows and outflows.
- There were no updates to the survey status table.

Review of Environmental Conditions and Survey Updates

- CDFW noted that Smelt Larva Survey (SLS) surveys have not yet been conducted and there are no other surveys to report on as of now. The FMWT team has been occupied with a special study for the last two weeks and have not provided any updates on the September or October FMWT indices.

USFWS provided updates on the Enhanced Delta Smelt Monitoring (EDSM) program and Chipps Island Trawl.

- Relevant information was distributed via email on Monday to the SMT.
- EDSM will run Monday to Friday due to needs for the DS experimental release program.
- Six LFS (65 to 103 mm) were caught in Suisun Marsh on November 8th.
- Two LFS (66 and 70 mm) were caught by Chipps Island Trawl on November 10th.

CDFW provided a salvage update (November 9th to 15th).

- No DS or LFS were salvaged at either facility.

USBR shared environmental data updates as of November 15th.

- Three-station daily average water temperature: 14.81° C.
- Three-day running average discharge at Freeport: 10,603 cfs.

- Three-day running average turbidity at Freeport: 12.23 FNU.
- X2 is >81 km.
 - Estimated Sacramento River X2 is 88.1 km.
 - Estimated San Joaquin River X2 is 90.7 km.
- Weather forecast out of Antioch is partly sunny to mostly cloudy with winds from the west to northwest between three and seven mph and gusts up to 21 mph. There is a slight chance for precipitation on Thursday.
- Weather forecast out of Stockton is mostly cloudy to clear with west to northwest winds between three and five mph.

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

USBR and CDFW noted conditions had not changed since the previous week. The SMT did not raise any items for discussion.

PART 3: Live-edit Assessments

ITP Longfin Smelt Risk Assessment

- CDFW reported no significant changes to the assessment since last week.
 - Some LFS are being detected in Suisun Marsh.
 - Adult movement patterns are consistent with what is expected (per the ITP Effects Analysis). Some detections at Chipps Island are anticipated in the coming weeks, with adults expected to move into the Delta at the beginning of December. LFS will likely stage in low salinity zones and then make short excursions into lower salinity or fresh water to spawn.
- USBR and CDFW agreed with CDFW's observations.

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

- USBR reviewed updates to the PA assessment.
 - There were no changes in population status and distribution information.
 - The language "adult" was dropped in certain cases where it was not applicable given subadult presence (e.g., when noting the SMT uses turbidity as a surrogate for DS presence).
 - Question 5 was updated to reflect the latest turbidity data.
 - USBR noted that the Holland Cut station is likely offline.
 - CDFW suggested that "below the confluence" be changed to "downstream of the confluence" in the executive summary.

Part 4: Additional Considerations/Discussion

Agencies reported no items for elevation to WOMT.