



Smelt Monitoring Team Meeting Summary

Tuesday, November 5, 2024

Meeting Objective

To collectively assess how current operations and environmental conditions could be impacting Delta Smelt and Longfin Smelt and to provide information to Water Operations Management Team (WOMT) on the status of Delta Smelt and Longfin Smelt, their exposure to operations of the CVP and SWP, and their potential sensitivity to environmental and operational changes; i.e., assess changes in risk week-to-week.

Participants

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

Action Items

- **SMT** members to share presentations with K&W or post to the SharePoint.
- **CDFW or DWR** to share the new ITP with the SMT following formatting revisions from CDFW.

Advice to WOMT

- No advice to WOMT.

Announcements

- DWR shared that the new SWP Incidental Take Permit (ITP) had been issued and became effective on November 4, 2024.
 - DWR notified the SMT that the new ITP had been signed. The December Delta Smelt and Longfin Smelt operations will be similar between the new and old ITPs,

with some additional measures that could initiate the OMR season. The new ITP changes the role of the SMT, where the SMT will provide advice to WOMT upon request. The role of the SMT is also expected to change on the federal side once the Biological Opinion (BiOp) is issued by USFWS and NMFS and subsequently the Record of Decision (ROD) is signed by USBR. The SMT should examine differences between the previous regulatory and new regulatory drivers (ITP for the state and BiOp/ROD for the federal). The new ITP also requires the SMT, along with SaMT and WOMT, to develop their own charters.

- USBR responded that the ROD will likely be finalized at the end of 2024. USBR wants to wait before initiating discussions about SMT's new charter, but input from the SMT on meeting frequency and documentation would be helpful.
- USFWS noted that until the new BiOp is issued and ROD signed operationalizing it, federal activities that the SMT engages in will be operating under the 2019 BiOp. Guidance/Charter document discussions will occur and will be a topic of conversation during existing agency coordination meetings.
- DWR and CDFW notified the SMT that they would share the new ITP when formatting errors had been corrected.
- USFWS asked DWR and CDFW whether there had been an exercise to see what possible points of conflict could be in terms of work windows or other conflicts between the 2019 Proposed Action (upon which the ROD is made) and the current ITP. DWR responded that there had not been a formal summarization of differences. The "First Flush" action is similar. If the new BiOp and ROD are delayed into January, the differences between the new and old regulations would become more noticeable. CDFW added that in the 2024 ITP, the turbidity bridge action could initiate OMR Management Season between December 20 and January 1.
- K&W shared an update on off-season planning and action items.
 - The controlling actions table will not be included in SMT meeting summaries but K&W could still track it to support annual reporting. This is still under consideration.
 - USBR asked if the information was being tracked elsewhere and K&W clarified that they had not been directed to track controlling actions elsewhere but that it could be tracked informally to support annual reporting requirements.
 - DWR added that environmental conditions are in the weekly Outlook to frame projected operations during week and those do not reflect what might happen or what could happen, and they have no impact on recommendations. The goal there is to set a scene; nothing else.
 - Mechanisms for communication between the SMT and WOMT

- K&W shared that the communication between technical teams and WOMT is an ongoing topic of discussion which will be clarified with the new permitting structure.
- New SharePoint
 - USBR asked about whether or not there has been a new process for commenting on meeting summaries using the SharePoint. K&W reminded the SMT of the editing process from the WY2024 season.
 - USFWS shared that they preferred to continue aggregating internal team comments and have the agency lead share with K&W.
 - The SMT agreed to follow past practice for editing meeting summaries.
 - USBR asked if it would be helpful to add some of the literature around Smelt.
 - SMT agreed.
- USFWS Studies in offseason
 - K&W reported no action from USFWS in the off-season.
- K&W shared the presentation schedule with the SMT.
 - USFWS shared that they will provide an update on the timeline for the new BiOp but they cannot address the substance of the BiOp since the document has not been issued.

Meeting Summary

Part 1: Updates on Water Operations and Biological Conditions Updates

Relevant Actions & Triggers

- There are no active actions or triggers at this time.

The ITP Conditions of Approval in the table below are from the 2020 SWP ITP, this table will be updated with the 2024 SWP ITP Conditions of Approval as it becomes available.

OMR Management Season for smelts has not begun for the season. The table below summarizes the status of OMR Management Measures and Conditions of Approval on a week-to-week basis through updates in the "Action Status" column on the far right. For full descriptions of OMR Management Measures and Conditions of Approval, please see the OMR Guidance Document or ITP.

Proposed Action

OMR Management Measures	Requirement	Time Frame	Trigger	*Action Status
Integrated Early Winter Pulse Protection (IEWPP) ("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 cubic feet per second (cfs).	Dec 1 to Jan 31	(1) Running 3-day average of daily flows at Freeport >25,000 cfs; and (2) Running 3-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
OMR Management	Manage to a more positive OMR than -5,000 cfs.	From the onset of OMR management to the end.	N/A	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 DS 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

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

OMR Management Measures	Requirement	Time Frame	Trigger	*Action Status
Larval and Juvenile Delta Smelt	Run hydrodynamic models and forecasts of entrainment, informed by the Enhanced Delta Smelt Monitoring (EDSM) or other relevant survey data to estimate the percentage of larval and juvenile DS 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 DS are within the entrainment zone of the pumps based on real-time sampling of spawning adults or young of year life stages. USFWS Memo/Technical Note 47: When the Secchi depth in the South Delta is less than 1 meter, USBR will operate to OMR no more negative than -3,500 cfs. When the Secchi depth in the south Delta is greater than 1 meter, USBR and DWR will operate to OMR no more negative than -5,000 cfs.	Not Active
End of OMR Management	OMR criteria may control operations until June 30 (for DS 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 (CCF) reaches 77°F for 3 consecutive days	Not Active

ITP Conditions of Approval

Condition of Approval	Requirement	Time Frame	Trigger	Action Status
8.1.5.2 (Smelt Monitoring Team Risk Assessment)	Outlines contents for weekly risk assessments of DS 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	N/A	Not Active
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 (SMT) 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	3-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 SMT 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 (COA 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 (Condition of Approval 8.3) if: Cumulative combined LFS salvage (total estimated LFS counts at the CVP and SWP salvage facilities beginning December 1 through February 28 exceeds the most recent Fall Midwater Trawl (FMWT) LFS index divided by 10, Real-time monitoring of abiotic and biotic factors indicates a high risk of LFS movement into areas at high risk of future entrainment, as determined by DWR and CDFW SMT staff.	Dec 1 through Feb 28 th	Salvage threshold for water year (WY) 2024 is 46.4.	Not Active

Condition of Approval	Requirement	Time Frame	Trigger	Action Status
8.4.1 (OMR Management for Adult Longfin Smelt)	<p>The SMT shall conduct weekly risk assessments and decide whether to recommend an 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 1 st through June 30 th or until the temperature offramp occurs	(1) LFS larvae or juveniles are found in four or more of the 12 Smelt Larvae Survey (SLS) or 20 mm stations in the central or south Delta, or (2) LFS 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
8.4.3 High flow offramp for Longfin Smelt	If triggered, COA 8.4.1 and 8.4.2 are not required or would cease if previously required.	Throughout OMR management season	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

Condition of Approval	Requirement	Time Frame	Trigger	Action Status
8.5.1 Turbidity Bridge Avoidance	Maintain daily average turbidity at OBI at a level of less than 12 FNU. If the daily average turbidity at OBI is greater than 12 FNU, 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 FNU.	After the first flush or Feb 1 until end of OMR management or until CDFW agrees that the action may be ended or modified.	Turbidity at OBI > 12 FNU	Not Active
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 trigger (2) or (3) are met, this Condition of Approval will restrict south Delta exports to maintain a seven-day average OMR index no more negative than -3,500 cfs until the average Secchi depth is greater than 1 meter in the south Delta stations in a subsequent SLS or 20 mm survey. If average south Delta Secchi depth continues to be less than or equal to 1 meter in a subsequent SLS or 20mm survey, then Permittee shall continue restrictions and request a risk assessment by the Smelt Monitoring Team to determine if additional advice and subsequent restrictions are warranted and provide advice to WOMT.	Nov 1st through June 30th or until off-ramped by 8.8.	(1) When the five-day salvage of juvenile DS is greater than or equal to one plus the average prior three years' FMWT index (rounded down). The 2023 September through December FMWT index for DS was zero. Or (2) when a larval/juvenile DS is detected in SLS/20 mm Or (3) the 3-day average water temperature at Jersey Point is $\geq 12^{\circ}\text{C}$ and Secchi from the most recent SLS/20 mm survey is $\leq 1\text{m}$ averaged across the 12 stations (809, 812, 815, 901, 902, 906, 910, 912, 914, 915, 918, and 919)	Not Active
8.8 (End of OMR Management)	If triggered, OMR Management would be off-ramped for LFS and DS.	From the onset of OMR management through June 30th	Daily mean water temperature at CCF is $> 25^{\circ}\text{C}$ for three consecutive days.	Not Active

Condition of Approval	Requirement	Time Frame	Trigger	Action Status
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 LFS, and from March 1st through June 30th for DS	Larval Smelt are detected at SLS Station 716 during the period identified for each species, and/or when recommended by the SMT.	Not Active
8.17 (Export Curtailments for Spring Outflow)	Reduce exports from April 1 st to May 31 st each year to achieve the SWP proportional share of export reductions established by the ratio of Vernalis flow to combined CVP and SWP exports, scaled by water year type, to provide incidental spring outflow.	April 1 st through May 31 st	The three-day average Delta outflow is less than 44,500 cfs	Not Active

Not active: The COA could become active in this season, but the on-ramp conditions have not been met.

Active, not triggered: The on-ramping condition has been met, but the trigger condition has not been met.

Active, triggered: The trigger condition has been met.

Off-ramped: This COA could no longer become active in this season.

* Glossary

Review of Environmental Conditions and Survey Updates

CDFW delivered catch updates on relevant surveys to the SMT.

- Updates from Fall Midwater Trawl and San Francisco Bay Survey will be provided when available.
- Smelt Larva Survey (SLS) will begin sampling on 12/2/2024.

USFWS provided catch updates for EDSM and Chipps Island Trawl.

- USFWS sampled with EDSM and Chipps Island Trawl between 10/1 and 11/1, 2024 and detected 0 DS of any size.
 - EDSM was on the water from 10/1/2024-10/31/2024 and detected 16 LFS in Suisun Marsh and Grizzley Bay.
- USBR asked USFWS whether survey updates would be added to Bay-Delta Live this season.
 - USFWS responded that they did not know and would reach out with changes but expected things would remain the same as the previous year.

CDFW shared the following salvage update.

- No DS or LFS were detected in salvage.
 - The Tracy fish facility reported that on 10/30 during the 0200 count, sampling did not occur due to large amounts of debris likely cause by the removal of South Delta temporary barriers.
 - Pumping at the Jones Pumping Plant was reduced to 0cfs on 11/4/2024 from 1230 to 1630 and no salvage was conducted at that time.
 - The Skinner salvage facility reported that the typical extended fish count (45 minutes instead of 30 minutes) during the daylight savings time change did not occur.
- USBR clarified that Jones Pumping Plant exports had been reduced to 0cfs due to outages and issues and that the plant was operating at 2 pumps pumping 1800cfs as of the meeting time.

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

DS

- USBR suggested keeping risk low for DS for all life stages in all regions. There have been no survey detections since 8/7/2024, historically there is low risk at this time of year based on distribution of DS.
 - CDFW, DWR, and USFWS concurred.
- DWR added that Year 4 of Culture and Supplementation of Smelt Experimental Releases will begin on November 19, 2024.

- CDFW asked whether DS production at Fish Culture and Conservation Laboratory was expected to meet the 100,000 fish goal. DWR responded that there are likely to be DS beyond the 100,000 target and that production is going well. Releases are planned to be at Lookout Slough and Little Egbert Tract.

LFS

- CDFW suggested keeping risk for LFS low for all life stages in all regions based on survey detections and historical population distribution outside the zone of entrainment.
 - DWR, USBR, USFWS concurred.

Part 3: Live-edit Assessments

Review of Tables 2 and 3 of the Fish and Water Operations Outlook

The SMT reviewed and discussed updates to Tables 2a, 3b, and 3c of the Weekly Fish and Water Operations Outlook which include the latest dates, detections, conditions, and data.

DS

- CDFW requested COA 8.5.2 be changed to say "Not Active".

LFS

- No edits were suggested or noted.

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

The SMT reviewed and discussed updates to the PA Assessment for DS, which include the latest dates, detections, conditions, data, and reflects the discussion documented in Part 2 above.

- Life Stages Present: Juveniles, Sub-Adults, Adults
- Sampling surveys beginning
 - EDSM phase 3 began 07/01/2024
 - SLS: 12/2/2024
 - 20mm: 3/10/2025
 - Summer Towntnet: 6/9/2025
 - Broodstock Collection:
 - Larval Entrainment Survey: 1/6/2025
- Questions
 - Nothing is relevant at this time.

ITP Longfin Smelt and Delta Smelt Risk Assessment

The SMT reviewed and discussed updates to the ITP Risk Assessment for DS and LFS, which include the latest dates, detections, conditions, data, and reflects the discussion documented in Part 2 above.

Advice to WOMT and LFS Executive Summary:

- No advice to WOMT.

Delta Smelt

- Risk is Low for all life stages in all regions.
- One larval DS was detected in the North Delta (Station 718) by 20-mm Survey 4.

Longfin Smelt

- Risk is Low for all life stages in all regions.

Change in Exposure

- Delta Smelt: No changes.
- Longfin Smelt: No changes.

Life Stages Present

- Delta Smelt: Juveniles, Sub-Adults, Adults.
- Longfin Smelt: Juveniles, Sub-Adults, Adults.
- CDFW explained the LFS tables and rationale for all the life stages and regions walking new members through the documentation and determining factors. When asked, CDFW shared that there is a new effects analysis ready to share but that formatting issues are being fixed along with other sections of the ITP.
 - DWR noted that there are missing attachments from what CDFW sent them.
 - CDFW responded that some of those documents will be shared when they are corrected.

Part 4: Additional Considerations/Discussion

Agencies reported no items for elevation to WOMT.

Next SMT Meeting

The next SMT meeting will be held on Tuesday 11/12/2024 on Microsoft Teams.