

Smelt Monitoring Team Meeting Summary

Tuesday, November 19, 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 (Reclamation)
- U.S. Fish and Wildlife Service (USFWS)
- Kearns & West (K&W).

Action Items

None.

Advice to WOMT

No advice to WOMT.

Announcements

- The LTO Biological Opinion is available online at the <u>Long-Term Operation of Central Valley Project and State Water Project website</u>.
- The SacPAS and ITP presentations will be rescheduled.

Meeting Summary

Part 1: Updates on Water Operations and Biological Conditions

Relevant Actions & Triggers

- There are no active actions or triggers at this time.
- The SWP and CVP are both operating to D-1641 standards.

The table below has been updated with the 2024 SWP ITP Conditions of Approval.

OMR Management Season for smelts has not begun for the 2024-25 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

*Action Measures Requirement Time Frame Trigger Status (1) Running 3-day Integrated Early Reduce exports for 14 Dec 1 to Jan 31 Not Active Winter Pulse consecutive days so average of daily Protection (IEWPP) that the 14-day flows at Freeport ("First Flush" averaged OMR index >25,000 cfs; and for the period shall (2) Running 3-day Turbidity Event) not be more negative average of daily than -2,000 cubic feet turbidity at Freeport per second (cfs). ≥50 Nephelometric **Turbidity Units** (NTU1); 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.

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

Measures	Requirement	Time Frame	Trigger	*Action Status
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
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, Reclamation will operate to OMR no more negative than -3,500 cfs. When the Secchi depth in the south Delta is greater than 1 meter, Reclamation and DWR will operate to OMR no more negative than -5,000 cfs.	Not Active

Measures	Requirement	Time Frame	Trigger	*Action Status
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

Approval	Requirement	Time Frame	Trigger	Action Status
8.3.1 (First Flush)	Adjust south Delta exports for 14 consecutive days to maintain a 14-day average OMR index no more negative than -2,000 cfs within three days of when the criteria are met.	Dec 1 through Feb 28	3-day running average daily flows at Freeport greater than, or equal to, 25,000 cfs, AND Threeday running average of daily turbidity at Freeport is greater than, or equal to, 50 FNU.	Not Active
8.3.2 (Adult Delta Smelt Entrainment Protection)	Adjust south Delta exports to achieve a 5-day average OMR index no more negative than -3,500 cfs until the daily average turbidity in at least one of the three turbidity sensors is less than 12 FNU for two consecutive days.	After First Flush Action (8.3.1) or Dec 20 until the three-day average Jersey Point or Rio Vista water temperature reach 53.6°F	Daily average turbidity at or greater than 12 FNU at each of three turbidity sensors in the OMR corridor (Old River at Franks Tract near Terminous (OSJ), Holland Cut (HOL), and Old River at Bacon Island (OBI). Temporarily offramps when daily average flows at Vernalis are great than	Not Active
			10,000 cfs immediately reinstated when the daily average flows at Vernalis drop below 8,000 cfs.	

Approval	Requirement	Time Frame	Trigger	Action Status
Entrainment Protection)	Adjust south Delta exports to achieve one of the following depending on when the salvage threshold was exceeded: From December 1 to the start of the OMR Management season, Permittee, in coordination with Reclamation, shall adjust south Delta exports to achieve an OMR index no more negative than -5,000 cfs on a 7-day average for seven consecutive days and then, initiate OMR Management season; OR from the start of the OMR Management season to the end of February, if OMR Management was initiated by a different Condition of Approval, Permittee shall, in coordination with Reclamation, adjust south Delta exports to achieve an OMR index no more negative than -3,500 cfs on a 7-day average for seven consecutive days.	Dec 1 through Feb 28	Salvage threshold for water year (WY) 2025 is TBD.	Not Active
8.4.1 (Larval and Juvenile Delta Smelt Protection)	Adjust south Delta exports to achieve a 7-day average OMR index no more negative than -3,500 cfs until the average Secchi disk depth is greater than 1 meter. Adjust south Delta exports to achieve a 7-day average of the OMR index no more negative than -5,000 cfs when the average Secchi disk depth in the most recent survey is great than 1m.	Adult Delta Smelt Entrainment	Average Secchi disk depth in the most recent survey is less than 1 meter. Temporarily offramps when daily average flows at Rio Vista are greater than 55,000 cfs OR daily average flows at Vernalis are greater than 8,000 cfs, immediately reinstate when either daily average flows at Rio Vista are below 40,000 cfs or daily average flows at Vernalis are less than 5,000 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.

Review of Environmental Conditions and Survey Updates

CDFW delivered catch updates on relevant surveys to the SMT.

No updates.

USFWS provided catch updates for EDSM and Chipps Island Trawl.

- EDSM was on the water from 11/12/24-11/15/24, sampled 24 sites, and detected one (55 mm) juvenile DS and 45 LFS (55-110 mm) in Suisun Marsh.
 - The current DS abundance estimate as of 11/11/24 is 990 (95% Confidence Interval: 98 to 4,054).
- Chipps Island Trawl was on the water 11/12/24-11/15/24, sampled 30 tows, and detected no DS and one (61 mm) LFS.
- DS and LFS broodstock collected for the UC Davis Fish Conservation and Culture Laboratory (FCCL) has begun.

CDFW shared the following salvage update.

- No DS or LFS were detected in salvage.
- No operational variances were reported.

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

DS

- Reclamation suggested risk of entrainment for DS remains low. More DS are in the system after the 11/18/24 experimental release and the upcoming storm system will likely generate more favorable habitat through increased turbidity, however DS are rarely detected in the central and south Delta at this time of year.
 - CDFW, DWR, and USFWS concurred.

LFS

- CDFW suggested risk of entrainment for LFS remains low. X2 is very high (mid 90s km) but is anticipated to decrease with the incoming storm system.
 - DWR, Reclamation, and USFWS concurred.

Part 3: Live-edit Assessments

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

^{*} Glossary

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

- Updated Freeport flow and turbidity values in Table 2a.
- Updated Table 3b to reflect the 2024 ITP.

LFS

Updated Table 3c to reflect the 2024 ITP.

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.

- Updated to reflect the latest detection on 11/13/24 and updated abundance estimate.
- Added information from the 11/18/24 experimental release.
- Noted turbidity may increase as a result of the upcoming storm and QWEST is anticipated to fluctuate between negative and positive values depending on Delta Cross Channel Gates operations and precipitation.

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 11/26/2024 on Microsoft Teams.