BUREAU OF RECLAMATION

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 11/12/24 at 9:00 a.m.

Objective

Provide information to the Water Operations Management Team (WOMT), the U.S. Bureau of Reclamation (Reclamation) and California Department of Water Resources (DWR) on measures to reduce adverse effects from Delta operations of the Central Valley Project (CVP) and the State Water Project (SWP) on salmonids and green sturgeon. Final versions of the Proposed Action Assessment, and Fish and Water Operations Outlook will be posted to Reclamation's Delta Monitoring Work Group webpage, while final version of the Meeting Notes will be posted to Reclamation's Salmon Monitoring Team webpage. Meeting participants include representatives from: California Department of Fish and Wildlife (CDFW), DWR, National Marine Fisheries Service (NMFS), State Water Resources Control Board (SWRCB), Reclamation, and the U.S. Fish and Wildlife Service (USFWS).

Participants

- California Department of Fish and Wildlife (CDFW)
- California Department of Water Resources (DWR)
- NOAA 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 (K&W)

Announcements

Part 1. Updates on Water Operations and Biological Conditions

Relevant Actions & Triggers

- The 2024 SWP ITP was signed on 11/4/2024. This new permit is currently in effect with new Conditions of Approval (COAs) which will be included and updated throughout this document as they are in effect throughout the season.

- The Interim Operations Plan (IOP) is currently in effect resulting from a court order issued on 4/1/2024 and in effect until 12/20/2024. Reclamation shall adopt the following provisions of the SWP ITP:
    - 8.5.2 Larval and Juvenile Delta Smelt Protection
    - 8.6.1 Winter-run Single-year Loss Threshold
    - 8.6.2 Early-season Natural Winter-run Chinook Salmon Discrete Daily Loss Threshold
    - 8.6.3 Mid- and Late-season Natural Winter-run Chinook Salmon Daily Loss Threshold
    - 8.6.4 Daily Spring-run Chinook Salmon Hatchery Surrogate Loss Threshold
    - 8.7 OMR Flexibility During Delta Excess Conditions
    - 8.8 End of OMR Management
- **Delta Cross Channel (DCC) Gate operations (PA 4.10.5.3):** See Outlook and Assessment for more information.
- **ITP 2024 Early-season Natural Winter-run Chinook Salmon Discrete Daily Loss Threshold (COA 8.17):** DWR will operate Banks Pumping Plant consistent with COA 8.17 of the ITP. These values are based on the November 1 – November 30 threshold of 6 older juvenile Chinook salmon per day. If the threshold is exceeded, a 5-day average OMR index of -5,000 cfs will be operated to for 5 days.
- **ITP Winter-run Chinook Salmon Annual Loss Thresholds (COA 8.4.3):** DWR and Reclamation will operate Banks Pumping Plant consistent with Condition of Approval 8.4.3 of the ITP. These values are based on the juvenile production estimate (JPE). The final JPE for brood year 2024 natural-origin winter-run Chinook salmon will be determined early next year. The thresholds below will be based on the final JPE.
    - The ITP natural-origin Winter-run Chinook salmon Annual Loss Threshold for this year is based on the initial length-at-date (LAD) identification of natural-origin older juvenile Chinook salmon and the thresholds described above. If genetic analysis of natural-origin older juvenile Chinook salmon observed in salvage at the SWP or CVP subsequently confirms that any given Chinook salmon is not genetically identified as a CHNWR that fish will not count towards the loss threshold. This threshold is loss of natural-origin winter-run Chinook salmon from the CVP and SWP greater than or equal to 0.5% of the winter-run Chinook salmon JPE (loss ≥ N/A). If the 75% loss is exceeded AND the Winter-Run Chinook salmon Machine Learning Model predicts that an OMR index of -2,500 cfs would shift the model output to a classification of CHNWR absence with a minimum probability of absence prediction of 0.559 for 1 of 30 sub-models for any of the 7 most recent prediction days, then a 7-day average OMRI index of -2,500 cfs will be operated to for 7 consecutive days. Thereafter, each winter-run observed in salvage will trigger a 7-day OMR index of -2,500 cfs for 7 consecutive

days IF the Winter-Run Chinook salmon Machine Learning Model predicts that an OMR index of -2,500 cfs would shift the model output to a classification of CHNWR absence with a minimum probability of absence prediction of 0.559 for 1 of 30 sub-models for any of the 7 most recent prediction days The JPE has not yet been calculated for WY 2025; therefore, threshold values are not yet available but natural-origin winter-run loss is still being tracked until these thresholds are determined.

- The ITP hatchery-origin Chinook salmon Annual Loss Threshold for this year is loss of clipped CWT winter-run Chinook salmon from the CVP and SWP greater than or equal to 0.12% of the winter-run Chinook salmon hatchery-origin JPE (loss ≥ N/A). If the 50% and 75% thresholds are exceeded, the same process will occur as what occurs for the natural-origin winter-run Chinook salmon (as discussed in above bullet).
- The JPE has not yet been calculated for WY 2025 and hatchery-origin winter-run Chinook salmon have not been released yet in WY 2025; therefore, threshold values are not yet available for hatchery-origin or natural-origin winter-run Chinook salmon.

Weekly Fish and Water Operations Outlook, Current Operations

- SaMT reviewed and updated the Outlook document. The updated Outlook document will be shared with SaMT via SharePoint link by close of business (COB) 11/13/24. Additional details and operations context shared at the 11/12/24 meeting include:
- Sacramento River flows at Freeport are 8,700 cfs on 11/12/24 with the possibility of variance due to storm runoff and additional precipitation later in the week.
- San Joaquin River flows were around 1,400 cfs on 11/11/24 and is expected to remain relatively stable.
- Delta Outflow remains close to the 4,700 cfs flow objective and is expected to remain near the 4,500 flow objective.
- Clifton Court Forebay (CCF) exports are at 1,000 cfs as of 11/11/24 and are expected to be slightly higher this week with the recent and anticipated precipitation.
- QWEST is in the range of +1,000 cfs and may vary this week between -1,200 cfs and +2,000 cfs.
- Rio Vista flows are approximately 3,800 cfs and will range up to 7,000 cfs depending on the position of the DCC gates.
- X2 is expected to move further upstream of Collinsville with the high tide.
- SWP share of San Luis Reservoir storage is approximately 705 TAF as of 11/11/24.
- CVP share of San Luis Reservoir storage is approximately 340 TAF as of 11/12/24.

SaMT Estimates of Fish Distribution

- SaMT estimates of the current distribution of listed Chinook salmon and CCV steelhead, as a percentage of each population, are based on recent monitoring data and historical migration timing patterns. Estimates this week are based on YOY winter-run and YOY spring-run as well as natural origin steelhead at the real-time monitoring locations. These estimates are reported in the final Assessment document, available on the Delta Monitoring Workgroup webpage.

Table 1. Fish Distribution Table

Due to the Veterans Day holiday on 11/11/24, data was not able to be reviewed before the meeting; therefore, the table was not updated this week.

Location	Yet to Enter Delta	In the Delta	Exited the Delta
Young-of-year (YOY) winter-run Chinook salmon	Current: 98-99% Last week: 98-99%	Current: 1-2% Last week: 1-2%	Current: 0% Last week: 0%
YOY spring-run Chinook salmon	Current: 100% Last week: 100%	Current: 0% Last week: 0%	Current: 0% Last week: 0%
YOY hatchery winter-run Chinook salmon	Current: N/A Last week: N/A	Current: N/A Last week: N/A	Current: N/A Last week: N/A
Natural origin steelhead	Current: 100% Last week: 100%	Current: 0% Last week: 0%	Current: 0% Last week: 0%

Justification for Fish Distribution Figures

- YOY winter-run Chinook salmon
    - N/A
- YOY spring-run Chinook salmon
    - N/A
- YOY hatchery winter-run Chinook salmon
    - N/A
- Natural origin steelhead
    - N/A

Part 2: Open Discussion on Species Status

Late-fall-run Chinook salmon Releases

- CDFW shared that late-fall-run Chinook salmon from Coleman National Fish Hatchery are scheduled for release after the Thanksgiving holiday. Release timing will depend on the presence/absence of a storm event during the week of 11/25/24.

Salvage Update

- On 11/7/24, the SWP facility salvaged a white sturgeon with a total length of 509 mm. The salvage for this fish will be expanded to 4. It has been reported to the incoming White Sturgeon Science Team coordinator and co-chair. Historically, sturgeon have been discussed within SaMT. It is being determined whether sturgeon will continue to be reported with SaMT or with a separate team.

Hatchery and Collection Facility Operations

- On 11/4/24, the CVP facility did not salvage from 12:27 to 16:30 hours due to zero-cfs pumping for unknown reasons.
- On 11/5/24, the CVP facility did not conduct counts for 22:00 or 24:00 hours due to an issue with the sampling bucket hoist.

Part 3. Live Edit Assessments

Proposed Action Assessment

- SaMT reviewed and updated the current week's Proposed Action Assessment document. The updated Proposed Action Assessment will be available to SaMT on SharePoint by COB 11/12/24. The final assessment will be posted to Reclamation's Delta Monitoring Workgroup webpage.

ITP Risk Assessment

- The updated draft ITP Risk Assessment will be distributed via email by COB 11/12/24 for review by SaMT members with comments due by COB 11/14/24. The ITP Risk Assessment will be finalized by COB on 11/15/24 and can be found on CDFW's Water Project Operations webpage.

Part 4. Additional Considerations/Discussion

- N/A

Items to Raise to WOMT

- None

Next SaMT Meeting

- The next SaMT Meeting is scheduled for Tuesday, 11/19/24 at 9 a.m.

Action Item

- N/A