Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 11/19/24 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

- CDWF will complete an internal review of the ITP before presenting it to the SaMT group at a future meeting.

Part 1. Updates on Water Operations and Biological Conditions

Relevant Actions & Triggers

- **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) 11/20/24. Additional details and operations context shared at the 11/19/24 meeting include:
- Feather River flows are at 1,750 cfs with the possibility of some variance due to forecasted storm later in the week.
- Sacramento River flows at Freeport are 9,000 cfs as of 11/18/24 and are expected to stay there over the coming days. Flows are expected to increase significantly due to storm runoff and additional precipitation later in the week.
- San Joaquin River at Vernalis flows were approximately 1,300 cfs on 11/18/24 and are expected to remain relatively stable.
- Delta Outflow will remain at 4,000 cfs until precipitation increases at which point outflows may reach upwards of 20,000 cfs.
- Clifton Court Forebay (CCF) exports are at 2,400 cfs as of 11/19/2024 with the possibility for significant increase due to the anticipated storm runoff and precipitation.
- QWEST is in the range of +1,000 cfs and will be negative over the coming days before returning to positive once the precipitation arrives.
- Rio Vista flows were approximately 4,000 cfs as of 11/18/24 and will range up to 6,000 cfs depending on the position of the DCC gates.
- X2 is expected to move further upstream of Collinsville. The storm should push it further west.
- SWP share of San Luis Reservoir storage is approximately 697 TAF as of 11/18/24.
- CVP share of San Luis Reservoir storage is approximately 351 TAF as of 11/19/24.
- Jones Pumping Plant is at 2,700 cfs and will be increased to 3,400 cfs on 11/20/2024. Flows may be increased to 4,200 cfs if conditions allow for the increase.
- Questions on Operations:
- When is the storm event anticipated to begin?
- The storm event is expected to begin the morning of 11/20/24 and is anticipated to last for about six days.
- Will the tidal cycle transition from neap to spring?
- The cycle will transition to neap this week.

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

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
    - CDFW shared that no salmonids were observed in traps this week, and that escapement for winter run was low this year. Due to the low escapement this year for winter-run it may be a year in which observations are very few at the RSTs; therefore, historical data and seasonal migration timing might be the best data we have to rely on to move fish out of the system. Salmonids may be observed in traps in the coming week due to the storm.
    - DWR mentioned that even if we don't see any fish with the storm events next week that we may have to move some into the Delta based on seasonal timing.
- 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

American River Updates

- As of 11/19/24, 493 carcasses have been collected from the American River. The week of 11/10-11/16/24 saw 361 carcasses collected of which 18% were pre-spawn mortality, 6% were freshly spawned, and 74% were spawned.
- American River temperatures are dropping and are currently at 56.7 degrees at Watt Avenue and 57.5 degrees below Nimbus Dam.

Late-fall-run Chinook salmon Releases

- CDFW shared that Coleman National Fish Hatchery will be releasing a surrogate release group in November, December, and January. CDFW proposed using the production group released on 11/20/24 as hatchery surrogate group number one since the release group is likely to be larger than the other releases and will coincide with the first major storm event of the season. The releases would fulfill both state and federal requirements.
- CDFW asked other agencies to share this option with their WOMT representatives.

Salvage Update

- As of 11/19/24, no protected species were collected at the salvage facilities.

Hatchery and Collection Facility Operations

- N/A

Part 3. Live Edit Assessments

ITP Risk Assessment

- SaMT reviewed the draft ITP Risk Assessment.
- Entrainment into the central Delta has increased this week primarily due to the storm event which is likely to move yearling spring-run into the Delta and the DCC gates potentially opening during this outmigration event; therefore, overall risk increased to medium.
- The Georgiana BAFF bubbles were intended to be operational this week, but it was damaged. The BAFF is still operational with lights and sounds; however, the bubbles are not functioning and it is unclear when it will be operational again.
- The final ITP Risk Assessment can be found on CDFW's Water Project Operations webpage.

Part 4. Additional Considerations/Discussion

- N/A

Items to Raise to WOMT

- CDFW reminded agencies to discuss spring-run surrogate releases with their respective WOMT representative.

Next SaMT Meeting

- The next SaMT Meeting is scheduled for Tuesday, 11/26/24 at 9 a.m.

Action Item

- CDFW to confirm if there are plans to include acoustic tagged fish in the surrogate groups.