



Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 1/7/25 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 (Reclamation)
- U.S. Fish and Wildlife Service (USFWS)
- Kearns & West (K&W)

Announcements

- N/A

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.

- **SWP ITP/CVP PA Winter-run Chinook Salmon Annual Loss Thresholds (COA 8.4.3/PA 3.7.4.5.3):** DWR and Reclamation will operate Banks Pumping Plant and Jones Pumping Plant consistent with COA 8.4.3/PA 3.7.4.5.3 of the SWP ITP/SWP and CVP PA. 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 later this month. Until the final JPE numbers are provided, the thresholds below will be based on the December 27, 2024 Interim JPE Memorandum.
 - The 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 threshold = $69,795 \times 0.5\% = 348.98$). 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 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 \geq 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 winter-run Chinook salmon.
- **SWP ITP/SWP and CVP PA Winter-run Weekly Loss Thresholds (COA 8.4.4/PA 3.7.4.5.4):**
 - DWR and Reclamation will operate Banks Pumping Plant and Jones Pumping Plant consistent with COA 8.4.4/PA 3.7.4.5.4 of the SWP ITP/CVP PA. These values are based on the product of the weekly percentage of natural-origin CHNWR

present in the Delta, scaled to 100% (Table 4, Column E of the SWP ITP), and 50% of the natural-origin CHNWR annual loss threshold (COA 8.4.3/PA 3.7.4.5.3). Due to a final JPE not being issued as of 1/7/25, the weekly thresholds are determined by the CHWR JPE surrogate equation. The thresholds for the month of January are as follows:

- 1/1/25 - 1/7/25: 0.56
 - 1/8/25 - 1/14/25: 0.56
 - 1/15/25 - 1/21/25: 2.27
 - 1/22/24 - 1/28/25: 2.27
- If the 7-day rolling sum of loss exceeds the above thresholds in any given week, the required response is to reduce SWP and CVP exports to reach an OMR index of no more negative than -3,500 cfs for seven consecutive days. DWR and Reclamation shall restrict exports in response to initial LAD identification of natural-origin older juvenile Chinook Salmon. If genetic analysis of an individual natural-origin older juvenile Chinook salmon observed in salvage at the SWP or CVP indicates that it is not a winter-run, that individual shall not count toward the daily loss threshold and continued export restrictions under this COA are not required if the weekly loss threshold has consequently not been met.

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) 1/8/24. Additional details and operations context shared at the 1/7/24 meeting include:
 - Sacramento River flows at Freeport are currently 48,000 cfs.
 - San Joaquin River at Vernalis flows are currently 1,348 cfs.
 - Delta Outflow is at 45,200 cfs.
 - QWEST is +3,260 cfs and expected to range between +1,800 cfs to +3,000 cfs.
 - Rio Vista flows are currently at 28,000 cfs and are expected to range between 15,000 cfs and 32,000 cfs.
 - OMRI is -5,000 cfs.
 - SWP share of San Luis Reservoir storage is approximately 886 TAF.
 - CVP share of San Luis Reservoir storage is approximately 544 TAF.
 - Total storage of the San Luis Reservoir is approximately 1.437 MAF.

- 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 young-of-year (YOY) winter-run, YOY spring-run, and natural origin steelhead at 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: 45-50% *Last week: 65-70%	Current: 50-55% *Last week: 30-35%	Current: 0% Last week: 0%
YOY spring-run Chinook salmon	Current: 80-90% *Last week: 95-99%	Current: 10-20% *Last week: 1-5%	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: 97-98% Last week: 100%	Current: 1-2% Last week: 0%	Current: 1% Last week: 0%

* "Last week" indicates week of 12/17/24. SaMT did not meet on 12/24/24 or 12/31/24 due to holidays; therefore, the fish distribution table was not updated during those two weeks.

Justification for Fish Distribution Estimates

- YOY winter-run Chinook salmon
 - SaMT reviewed the RST data and determined that approximately 19-20 winter-run were caught in real-time monitoring stations in the Delta, including RSTs, Sacramento beach seines, and Sacramento trawls; however, some traps were out of commission during that period of time, so this may not represent a comprehensive number of winter-run currently in the Delta.
 - SaMT chose to increase the amount of winter-run in the Delta by 20% for an updated total of 50-55% in the Delta due to the number of winter-run observed in the RSTs in the Delta over the previous couple weeks and the low recruitment of winter-run Chinook Salmon this year, SaMT agreed that a 20% increase in the Delta seemed appropriate this week.
 - SaMT has not observed any winter-run exiting past the Chipps Island RST and chose to leave the amount of winter-run that have exited the Delta to 0%.
- YOY spring-run Chinook salmon
 - SaMT reviewed the RST data and determined that approximately 28 spring-run were caught in real-time monitoring stations in the Delta, including RSTs, Sacramento beach seines, and Sacramento trawls; however, some traps were out of commission during that period of time, so this may not represent a comprehensive number of spring-run currently in the Delta.

- The fish restoration program reported catching 3 natural-origin, YOY spring-run at Horseshoe Bend in the Delta, presumably as a result of recent storm events. These fish were young-of-year sized with fork lengths of 43, 39, and 44 mm.
- Historically, based on SacPAS historical migration, on average, 35% of spring-run are observed at the Beach Seines by this time of year.
- SaMT agreed to increase the number of spring-run in the Delta to 10-20%.
- YOY hatchery winter-run Chinook salmon
 - No releases of hatchery-origin winter-run have occurred so far this season.
- Natural origin steelhead
 - Steelhead were observed at Chipps Island over the previous couple of weeks.
 - 1 natural-origin steelhead was observed at the Sacramento Trawl two weeks ago, as well as a few hatchery steelhead.

Part 2: Open Discussion on Species Status

Fish Monitoring Updates

- N/A

Salvage Update

- One older juvenile Chinook salmon was observed in salvage.
- Hatchery spring-run and late fall-run Chinook salmon were observed in salvage
- One hatchery steelhead was observed in salvage.

Hatchery and Collection Facility Operations

- No operational variances were reported.

Part 3. Live Edit Assessments

ITP Risk Assessment

- SaMT reviewed the draft ITP Risk Assessment.
- The final ITP Risk Assessment can be found on CDFW's [Water Project Operations webpage](#).

Part 4. Additional Considerations/Discussion

Discussion on Updated Assessment in conjunction with New Record of Decision (ROD)

- The new ROD states that "Reclamation will provide operational outlooks and Proposed Action assessments on a weekly basis to WOMT, the SMT, and the SaMT".
- Reclamation asked how SaMT members interpret the above statement.

- The Bay Delta Office (BDO) has discussed that a weekly Proposed Action Assessment (Assessment) creates redundancy with the new ROD and could be limited to weeks where a particular action calls for it.
- If no actions are triggered or planned to be triggered, the suggestion is to refrain from creating an Assessment for that particular week. If SaMT members favor this process, Reclamation requested input on language to WOMT that communicates when an Assessment is not needed.
- Reclamation is still in favor of a weekly outlook document for numbers tracking.
- SaMT members shared the following comments:
 - CDFW asked Reclamation if the Proposed Action requires a spring-run assessment each week. The CDFW ITP does require an Assessment on a weekly basis for spring-run. If needed, this could be elevated to WOMT.
 - Reclamation suggested providing email updates if there are weeks where meetings are unnecessary.
 - CDFW noted that the language in the Proposed Action and the ITP should be identical, per request of the subdirectors. However, in alignment with Reclamation, it may not be necessary to include all current Assessment content going forward in order to avoid redundancy.
 - CDFW suggested that Reclamation compile a list from scratch of the information topics to be included with SaMT providing feedback on that list.
 - CDFW also suggested that the current Fish & Water Operations Outlook (Outlook) could be pared down from its current version to only include necessary information.
 - CDFW recommended that SaMT members communicate with their WOMT representatives about what information they would like to be provided with on a regular basis. It's important that WOMT hear from SaMT about what items are truly necessary.
 - CDFW suggested that when an action is triggered for steelhead, it could be included in the weekly ITP Assessment, in its own section, rather than creating a Proposed Action Assessment.
 - Reclamation needs to consider this further before making a decision.
 - Reclamation shared that the rare occasions when an assessment may be needed include:
 - Reaching an annual threshold of 75% or greater on winter-run;
 - Incorporation of machine-learning modeling.

- CDFW noted that some sections of the Outlook, such as Environmental Fish Conditions and some of the data tables, are already included in the ITP Assessment and may not be necessary to include in the Outlook going forward.
- Meeting as a group might be easiest for the ITP Assessment process, but this could potentially be added at the end of the Weekly Operations call on Tuesday mornings.

Items to Raise to WOMT

- N/A

Next SaMT Meeting

- The next SaMT Meeting is scheduled for Tuesday, 1/14/25 at 9 a.m.

Action Items

- SaMT members to provide their WOMT representatives with the information topics they would like to see in the updated operations documents going forward in an attempt to streamline the amount of weekly documentation and provide greater efficiency to SaMT.