



Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 1/21/25 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

- The SMT and SaMT groups will continue to meet on Tuesdays at 9 a.m. PT for the Weekly Operations Meeting.

Beginning 1/28/25, SaMT members will stay on the Water Operations call to review the ITP Risk Assessment. 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 final juvenile production estimate (JPE).
 - 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 = $98,893 \times 0.5\% = 494.47$). If cumulative loss of natural-origin CHNWR in a brood year exceeds 50% of the annual loss threshold (loss > 247.24), then Permittee shall, in coordination with Reclamation, adjust south Delta exports to achieve a 7-day average of the OMR index no more negative than -3,500 cfs for 7 consecutive days. If a CHNWR is salvaged during the 7-day action, the action will be extended for another seven days. At the conclusion of the action, Permittee, in coordination with Reclamation shall revert to the weekly distributed loss threshold until the 75% threshold is reached or throughout the end of the OMR Management season. If the 75% loss threshold (loss > 370.85) 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 both LSNFH and Battle Creek 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 ≥ 162.41 and loss > 3.44 , respectively). 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 final JPE was distributed on 1/10/25 for WY 2025. Hatchery-origin winter-run Chinook salmon have not been released yet in WY 2025.
- **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). The final JPE Memo was issued on 1/10/25. The weekly thresholds for the month of January are provided below:
 - 1/1/25 - 1/7/25: 0.56
 - 1/8/25 - 1/9/25: 0.56¹
 - 1/10/25 - 1/14/25: 0.79²
 - 1/15/25 - 1/21/25: 3.21
 - 1/22/24 - 1/28/25: 3.21
 - 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 average 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 loss threshold and continued export restrictions under the PA or COA are not required if the weekly loss threshold has consequently not been met.

¹ The Week 1 calculation is based on the interim natural-origin winter-run Chinook salmon JPE of 69,795.

² Two values were calculated for Week 2 due to the natural-origin winter-run Chinook salmon JPE becoming available on January 10, 2025. The first calculation (1/8-1/9) uses the interim natural-origin winter-run Chinook salmon JPE of 69,795, whereas the second calculation (1/10-1/14) is based on the natural-origin winter-run Chinook salmon JPE as described in the Winter-run JPE Subteam Memorandum.

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) 1/22/25. Additional details and operations context shared at the 1/21/25 meeting include:
 - Sacramento River flows at Keswick are currently 6,000 cfs but will decrease to 5,000 cfs by 1/26/25.
 - Sacramento River flows at Freeport were 24,300 cfs as of 1/20/25 and are expected to decrease through the week.
 - San Joaquin River at Vernalis flows are currently 1,250 cfs and is expected to remain relatively stable.
 - Clifton Court Forebay (CCF) was exporting 800 cfs on 1/20/25 and will increase over the next couple of days as the Bureau is lower; they will swap back after work is completed on 1/24/25.
 - Jones Pumping Plant is currently exporting 800 cfs to allow for maintenance work that is expected to conclude on 1/23/25. Exports are scheduled to increase on 1/24/25.
 - Delta Outflow is at 23,000 cfs and is decreasing along with Sacramento River flows.
 - X2 is approximately 62 km and will likely increase as outflow decreases.
 - OMRI is -3,500 cfs.
 - SWP share of San Luis Reservoir storage is approximately 998 TAF.
 - CVP share of San Luis Reservoir storage is approximately 610 TAF.
 - Total storage of the San Luis Reservoir is approximately 1.5 MAF.

Part 2: Open Discussion on Species Status

Salvage Update

- Salvage numbers were not available at the time of the meeting due to the holiday on 1/20/25.
- CDFW asked if there were any length-at-date (LAD) older juveniles salvaged after 1/19/25.
 - CDFW confirmed that as of the morning of 1/21/25, no older juveniles were observed after the salvage on 1/19/25. DWR also confirmed this.

Hatchery and Collection Facility Operations

- A missed count was reported on 1/17/25 at the CVP collection facility.

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 Genetic Winter-Run Chinook Salmon

- CDFW noted that a genetic winter-run Chinook salmon was observed on 1/16/25. If any fish in the 7 days after 1/16/25 are genetically confirmed as winter-run, there will be a 7-day action of -3,500 cfs OMRI based on the 3.21 threshold.
 - DWR confirmed that based on the fish observed on 1/19/25, they would be planning to target an OMRI of -3,500 cfs for 7 days unless the genetic results reveal the fish to be anything other than winter-run.
- CDFW asked about the fish loss on 1/19/25. Since this loss was over the threshold, if the fish is genetically-confirmed to be winter-run, would this trigger the threshold?
 - DWR confirmed this is correct.
- CDFW asked for clarification on whether the action would be extended due to the 7-day rolling sum being continuously over the weekly threshold. For example, if a fish is genetically confirmed to be winter-run on 1/19/25, it would trigger the 7-day action again on 1/20/25 even in the absence of another salvage of winter-run Chinook because the loss of that individual is greater than 3.21 (loss of 8.80).
 - DWR responded that a rolling sum would be added through 1/22 that would include both fish. However, DWR interprets this as the action triggering on the day that the sum is exceeded. They don't believe the sum would roll through as if it began on 1/22/25. The rolling sum on 1/22/25 would still be in exceedance of the trigger, but the fish that triggered the rolling sum happened a few days previously. There would need to be additional salvage to cause it to carry forward.
 - DWR added that if they were in the middle of a 7-day action and reached a new, higher weekly loss, that wouldn't result in an offramp because the threshold would no longer be exceeded for that new week. It seems as if it should be a 7-day action based on the loss of a fish on a given day within that week.
 - DWR noted that the protective intention is to give fish 7 days to clear out.
 - DWR reported that COA 8.4.4 reads a bit ambiguously:
 - The weekly loss threshold is the product of that rolling sum;
 - If the threshold is exceeded on any single day by the 7-day rolling sum.

- DWR will investigate the possibility of any nuance with COA 8.4.4 and discuss with their WOMT representative.

Discussion on Future SaMT Meetings and Documentation

- CDFW asked if the assessment going forward will combine the Proposed Action Assessment and ITP Assessment.
 - Reclamation does not anticipate needing a weekly assessment other than for spring-run Chinook salmon, unless it's required once a threshold has been met. This is not expected to be a regular occurrence.
 - Reclamation suggested that when an assessment is necessary, it can be added into the ITP Assessment document.
- CDFW proposed taking a lead on the spring-run assessment development, since an ITP Risk Assessment will be done on a weekly basis. CDFW will check this with their management staff. CDFW also noted that the spring-run assessment will require review by Reclamation, DWR, and CDFW.
 - Reclamation expressed support for this suggestion.
 - CDFW will update the weekly draft ITP Risk Assessment by each Tuesday and make the document available on SharePoint for others to provide edits. This document will be reviewed by SaMT at the end of the Weekly Operations Meeting on Tuesdays. CDFW will then finalize the document on Thursdays.
- SaMT members should allow a full hour of meeting time on Tuesday mornings (9-10 a.m.) in order to complete the required Assessment steps. SaMT members expressed support for keeping a 2-hour calendar hold in the instance that any meetings require additional time versus adjusting the meeting time down to 1 hour.
- CDFW will incorporate an update on data from the winter-run machine learning model during the Weekly Operations Meeting.
- Chase Ehlo, Reclamation, presented some cases for when a Proposed Action Assessment would be necessary.
 - DCC Gate Action Triggers from October 1 – November 30
 - Trigger: Water quality criteria per D-1641 are met *and* Knights Landing Catch Index or Sacramento Catch Index greater than or equal to 3.0 *and* real-time hydrodynamic and salinity modeling shows water quality levels of concern criteria are exceeded during 14-day period following DCC closure
 - Action: DWR and Reclamation to review monitoring data and complete risk assessment to inform DCC gate operations
 - DCC Gate Action Triggers during Lower Mokelumne River flow releases

- Trigger: Water quality criteria per D-1641 are met *and* real-time hydrodynamic and salinity modeling shows water quality levels of concern criteria are exceeded during 14-day period following DCC closure
- Action: DWR and Reclamation to review monitoring data and complete risk assessment to inform DCC gate operations
- DCC Gate Action Triggers from December 1 – January 31
 - Trigger: Real-time hydrodynamic and salinity modeling shows water quality levels of concern criteria are exceeded during 14-day period following DCC closure
 - Action: Reclamation and DWR will prepare an assessment to evaluate opening the DCC gates for up to 5 days for up to two events within this period to avoid D-1641 water quality criteria exceedance
- OMR Management – Spring-Run Chinook Salmon
 - No trigger
 - Action
 - Coupled with new science gained through ongoing efforts to develop a spring-run JPE and life cycle model to inform weekly risk assessments (Oct – Jun) for natural-origin juvenile spring-run Chinook salmon
 - If the risk assessment identifies a more positive OMRI flow requirement is needed to minimize take of natural-origin juvenile spring-run Chinook salmon, the WOMT may consider a more positive OMRI flow requirement
- OMR Management – Winter-Run Annual Loss Threshold
 - Trigger: Cumulative loss of either natural or hatchery-origin winter-run Chinook salmon in a brood year exceeds 100 percent of the annual loss thresholds
 - Action: DWR and Reclamation will immediately convene the SaMT to review recent fish distribution information and operations and provide advice regarding future planned SWP and CVP operations to minimize subsequent loss during that year

Items to Raise to WOMT

- DWR to discuss COA 8.4.4 with their WOMT representative due to unclear verbiage.

Next SaMT Meeting

- The next SaMT Meeting will be scheduled on an as-needed basis. Weekly meetings will be discontinued going forward.