

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 5/6/25 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 <u>Delta Monitoring Work Group</u> webpage, while final version of the Meeting Notes will be posted to Reclamation's <u>Salmon Monitoring Team</u> 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

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 Condition of Approval (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 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.

- SWP ITP 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/SWP and 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 loss threshold for the remainder of the season is provided below:
 - 4/2/25 6/30/25: 0 fish
 - 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.
- **SWP ITP Spring Delta Outflow Implementation (COA 8.12.1):** Permittee shall reduce exports from April 1 to May 31 each year to achieve the SWP proportional share (COA 8.7) of export reductions established by the ratio of Vernalis flow (cfs) to combined SWP and CVP exports, scaled by water year type, to provide incidental spring outflow.
 - In a critical water year type, the ratio of Vernalis flow to SWP and CVP combined exports shall be 1:1
 - In a dry water year type, the ratio of Vernalis flow to SWP and CVP combined exports shall be 2:1
 - In a below normal year, the ratio of Vernalis flow to SWP and CVP combined exports shall be 3:1
 - In an above normal or wet year, the ratio of Vernalis flow to SWP and CVP combined exports shall be 4:1

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) 5/7/25. Additional details and operations context shared at the 5/6/25 meeting include:
 - Sacramento River releases at Keswick Dam will are currently 8,000 cfs. Beginning on 5/9/2025 releases from Keswick will increase to 14,000 cfs for 4 days before ramping down.

- Sacramento River flows at Freeport were approximately 21,700 cfs as of 5/5/25 and are expected to decrease.
- Feather River releases are decreasing from 2,300 to 2,100 cfs on 5/6/2025 with additional small decreases forecasted through 5/9/2025 to prioritize storage in Oroville in the near term.
- San Joaquin River flows at Vernalis were approximately 2,700 cfs on 5/5/25. Flows are decreasing after pulse flow operations. Flows peaked on 5/4/25.
- Clifton Court Forebay (CCF) exports will remain at 600 cfs. Annual Skinner Fish Facility maintenance is ongoing and exports will resume on 5/9/25. Water will still be moved into CCF but will not be pumped at Banks Pumping Plant.
- Jones Pumping Plant is currently exporting 1,600 cfs. Exports will begin ramping down on 5/6/2025 with a range of 900-1,600 cfs.
- Delta Outflow was approximately 22,500 cfs as of 5/6/25 and is expected to decrease through the remainder of the week.
- QWEST was +4,100 cfs on 5/5/25. The 7-day average is +4,800 cfs.
- Rio Vista flows were approximately 18,600 cfs and will be decreasing.
- X2 was 65 km as of 5/4/25 and will be variable with tides.
- CVP share of San Luis Reservoir storage is approximately 804 TAF.
- Total storage of the San Luis Reservoir is approximately 1.64 MAF.

Ouestions and Comments

- CDFW asked whether the White Sturgeon information is based on documented detections or migration timing.
- Another CDFW staff noted a number of White Sturgeon detection in the 20-mm
 Trawl surveys which is the data source. There are some detections that meet the
 conditions for COA 8.4.7 but others have been detected in Miner Slough and
 Chipps Island as well.
- K&W asked the SaMT for clarification about how to display sturgeon detection and migration information and whether that information should be broken down by Green and White Sturgeon.
- CDFW clarified the information encompasses both White and Green Sturgeon. Some of the surveys on the Feather River are hard to determine species. DWR made those updates with the detections at the afterbay outlet.

Part 2: Open Discussion on Species Status

• The SaMT did not discuss species status.

Part 3. Live Edit Assessments

Natural Spring-Run Weekly Risk Assessment

- SaMT reviewed and updated the Natural-origin Spring-Run Weekly Risk Assessment.
- Questions and Comments
 - CDFW asked what the approximate start date was for the group of unmarked Chinook Salmon?
 - DWR responded that date was 4/1 and was not sure if they were fish that had not been entered.
 - CDFW noted that they suspected that those fish were pink marked fish
 from the Merced River hatchery that have been observed recently. They
 noted that those are hatchery fish that do not have an adipose clip and
 do not have CWTs which make them hard to identify.
 - DWR thanked CDFW for the observation and makes sense with what they have seen.
 - CDFW noted that they have a different number than was being shown for loss of Group 2 for the Spring-run surrogates. Their data showed loss of 110.14 and suggested coordinating to confirm.
 - DWR responded that they would cross reference the data with their own to confirm the correct values before updating the relevant section if needed.

Part 4. Additional Considerations/Discussion

Table 3A: Chinook Salmon

• On Friday 5/1, the SWP observed coded wire tag (CWT) from Spring-run surrogate group 2. There are a number of natural-origin spring-run fish that have been observed in salvage and DWR is working to perform genetic analysis on those fish on a weekly basis so that information can be used for spring-run assessment. On 5/8 another batch of spring-run will have genetic testing and results will be shared when available.

Table 4: Fish Monitoring Gear Efficiency and Disruptions

• DWR suggested amending the SWP regular counts, CWT reading to including a partial interruption (5/4-5/9) and the SWP larval sampling to include partial interruption (5/4-5/9).

Steelhead Salvage vs Loss

• NMFS reported that WOMT decided that the language would be revisited in discussion on 5/7/2025.

Items to Raise to WOMT

1. N/A

Next SaMT Meeting

• The next Weekly Operations Meeting will be on Tuesday, 5/13/25. If needed, SaMT will meet at the conclusion of the Operations meeting.

Action Items

• CDFW to follow up with Kevin Reece and Farida Islam on the discrepancies between agency spring-run loss data.