BUREAU OF RECLAMATION

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 5/13/25 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

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 x 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
- The current San Joaquin Valley Index Water Year Type is Below Normal (CDEC); therefore ratio of San Joaquin flow at Vernalis to exports is 3:1**.**

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) 5/14/25. Additional details and operations context shared at the 5/13/25 meeting include:
    - Sacramento River releases at Keswick Dam are 12,000 cfs on 5/13/2025 with a range of 9,000-12,000 cfs.

- Sacramento River flows at Freeport were approximately 16,600 cfs as of 5/12/25 and are expected to increase with a pulse flow release from Keswick before receding.
- Clear Creek pulse flows are scheduled to begin on 5/15/2025 before reaching its maximum flow of 800 cfs on 5/16/2025 and returning to normal on 5/28/2025.
- Feather River releases are at 1,700 cfs on 5/13/2025 and may increase to match inflows as Oroville Reservoir fills.
- San Joaquin River flows at Vernalis were approximately 2,600 cfs on 5/12/25 and will decrease over the coming days.
- Clifton Court Forebay (CCF) exports will remain at 600 cfs and will continue until the end of the month.
- Jones Pumping Plant is currently exporting 900 cfs with a range of 900-1,600 cfs.
- Delta Outflow was approximately 13,000 cfs as of 5/12/25 and is expected to increase with Freeport flows before dropping.
- QWEST was +2,400 cfs on 5/12/25 and will increase with pulse flows before decreasing again but likely remain about +1,000 cfs. The 7-day average is +2,800 cfs.
- Rio Vista flows were approximately 13,700 cfs and will be increasing with Freeport flows before dropping again.
- X2 was 72 km as of 5/13/25 and will be variable with tides.
- CVP share of San Luis Reservoir storage is approximately 765 TAF.
- Total storage of the San Luis Reservoir is approximately 1.5 MAF.

- Questions and Comments
    - NMFS asked about the Spring Delta Outflow. Given the WY Type changed to Above Normal, requiring foregone exports at state and federal pumping facilities, is anyone on the call able to speak to that?
        - DWR shared that Spring Outflow requirements in COA 8.12.1 are based on the San Joaquin Water Year Type which remains Below Normal and as such there is no change needed.
        - NMFS asked DWR if the 600 cfs is the minimum health and safety flow.
        - DWR responded that 600 cfs is the minimum under COA 8.12.1 and would require pumping at or below 600 cfs.
        - NMFS asked about any impacts to Federal exports given the current export range of 900-1,600 cfs.

- Reclamation responded that they are operating to Vernalis flow ratio of 1:1 and their 60% share of that.
- NMFS noted that their BiOp and the 2024 Proposed Action notes that for the first two years of implementation that Spring Delta Outflow would occur and assumes this is in addition to the Vernalis flows and foregone exports. Can anyone speak to that?
- Reclamation noted they would need to follow up with a more concrete answer.
- NMFS noted that they would like some additional clarity given the new operations structure and their review of the modelling Appendix F which shows different values than in the Proposed Action. NMFS suggested more discussion in SaMT next week when there is more information available and noted that they would coordinate with their management for additional clarity.

Part 2: Open Discussion on Species Status

- DWR shared that a LAD Winter-run Chinook had been salvaged on 5/11/2025 and a genetic sample is undergoing analysis at Cramer Fish Science and DWR SHERLOCK. Results would be distributed to the SaMT when available.

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 made a comment on DWR's assessment. Added that pulse flows coming from Keswick are intended to move Spring-run down river in particular from Mill and Deer creeks and suggested making that change following the meeting.
    - DWR asked that CDFW share proposed language and would add that to the assessment.

Part 4. Additional Considerations/Discussion

Table 1: Sacramento River

- The SaMT discussed a comment left on the table which asked if Green Sturgeon hatching and movement are observed because the timing seems early based on historical data.
    - CDFW shared that they did not know where that comment came from and could not speak to the comment or to the changes that were made to the text.
    - Reclamation agreed to coordinate with the commenter for additional clarity.

Steelhead Assessment

- SaMT reviewed and updated the Steelhead Risk Assessment.
- Questions and Comments
    - K&W asked the SaMT if they had received feedback from WOMT regarding the steelhead loss language discussed in previous weeks.
    - NMFS noted that they would know more tomorrow. Reclamation would need to speak with their management to change the language from Salvage to Loss.
    - SWRCB reminded the SaMT that last week's WOMT notes reflect that WOMT did approve the change but that conversations are ongoing about how to reflect that change in the Proposed Action.

Items to Raise to WOMT

1. N/A

Next SaMT Meeting

- The next Weekly Operations Meeting will be on Tuesday, 5/22/25. If needed, SaMT will meet at the conclusion of the Operations meeting.

Action Items

- **Kristin Begun** to coordinate with NMFS management regarding Spring Delta Outflow requirements under COA 8.12.1.
- **Tony Yang** to coordinate with their colleague on the information about Green Sturgeon from Table 1 of the Outlook.