BUREAU OF RECLAMATION

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 2/4/25 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

- SaMT will review the Storm Flex Assessment on 2/4/25.

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 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 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 previous week and the upcoming few weeks are provided below:
        - 1/29/25 - 2/4/25: 17.08
        - 2/5/25 - 2/11/25: 32.46
        - 2/12/25 - 2/18/25: 36.74
    - 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.

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) 2/5/25. Additional details and operations context shared at the 2/4/25 meeting include:
    - Feather River releases have increased from the previous week to 35,000 cfs and are expected to remain there for a couple of days or potentially decreasing. Flows are not expected to reach the higher end of the range listed in the Operations Outlook, which is 60,000 cfs.
    - Sacramento River releases at Shasta Dam increased from 5,000 cfs to 7,500 cfs on 2/4/25. Releases will increase again to 20,000 cfs on 2/6/25 for storage management.
    - Sacramento River flows at Freeport were 47,000 cfs as of 2/3/25 and are expected to reach 60-70,000 cfs through the week due to the likelihood that the Fremont Weir will start flowing on 2/4/25.
    - San Joaquin River at Vernalis flows are currently 1,200 cfs as of 2/4/25 with a forecasted range reaching up to approximately 2,000 cfs.
    - Clifton Court Forebay (CCF) is exporting 3,000 cfs as of 2/4/25 and the target OMRI is -6,250 cfs.

- Delta Outflow was 31,000 cfs on 2/3/25. The range for the week lists flows at 100,000-150,000 cfs when factoring in the Fremont Weir flows.
- X2 continues to move further west and was at 73 km on 2/3/25.
- QWEST was +1,600 cfs on 2/3/25 and may reach as high as +9,000-10,000 cfs.
- Rio Vista flows were approximately 30,000 cfs on 2/3/25 and are expected to increase significantly over the next couple of days.
- CVP share of San Luis Reservoir storage is approximately 631 TAF.
- Total storage of the San Luis Reservoir is approximately 1.55 MAF.
- Questions
    - CDFW asked if the higher releases from reservoirs this week were for flood control measures, given the recent precipitation events.
        - Reclamation responded that releases are occurring for storage management.
        - DWR confirmed that their releases are flood-control related.

Part 2: Open Discussion on Species Status

- N/A

Part 3. Live Edit Assessments

SWP ITP Operations Summary and Chinook Salmon Assessment

- SaMT reviewed the draft SWP ITP Operations Summary and Chinook Salmon Assessment.
- The final version can be found on CDFW's Water Project Operations webpage.

Weekly Assessment of CVP and SWP Delta Operations on ESA-listed Species

- SaMT reviewed the Weekly Assessment of CVP and SWP Delta Operations on ESA-listed Species, also referred to as the "Storm Flex Assessment" shared by Reclamation. DWR discussed that they shared an almost identical version of the "Storm Flex Assessment" with SaMT. The DWR Assessment does not include steelhead or Green Sturgeon.
- CDFW noted that in the future, if time allows, they would be able to provide Jereme Gaeta's Winter-Run Chinook Salmon Machine Learning Model runs for an analysis on winter-run Chinook Salmon since it is an updated model that predicts salvage at the facilities based on environmental conditions.

Part 4. Additional Considerations/Discussion

- N/A

Items to Raise to WOMT

- N/A

Next SaMT Meeting

- The next Weekly Operations Meeting will be on Tuesday, 2/11/25. If needed, SaMT will meet at the conclusion of the Operations meeting.

Action Items

- Chase Ehlo, Reclamation, to replace an incorrect steelhead chart with the appropriate winter-run Chinook chart in the Storm Flex Assessment.