



Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 12/17/24 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

- This is the last meeting of 2024 due to the upcoming holidays in December. The next meeting will be on January 7, 2025.

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.

- ITP 2024 Natural-origin Winter-run Chinook Salmon Early Season Weekly Loss Thresholds (COA 8.2.1):** Permittee will operate OMRI consistent with 8.2.1 of the ITP. These values are based on the December 21 – January 1 threshold of a 7-day rolling sum of 32.64. Loss will be tracked 6 days prior to this COA being in effect and be included in the 7-day rolling sum. If the threshold is exceeded, a 7-day average OMR index of –5,000 cfs will be operated to for 7 days.
- ITP 2024 Early-season Natural Winter-run Chinook Salmon Discrete Daily Loss Threshold (COA 8.17):** DWR will operate Banks Pumping Plant consistent with COA 8.17 of the ITP. These values are based on the December 1 – December 31 threshold of 26 older juvenile Chinook salmon per day. If the threshold is exceeded, a 5-day average OMR index of -5,000 cfs will be operated to for 5 days.
- ITP Winter-run Chinook Salmon Annual Loss Thresholds (COA 8.4.3):** DWR and Reclamation will operate Banks Pumping Plant consistent with Condition of Approval 8.4.3 of the ITP. 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 early next year. The thresholds below will be based on the final JPE.

 - The ITP 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 \geq N/A). 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 ITP 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 or natural-origin winter-run Chinook salmon.

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) 12/19/24. Additional details and operations context shared at the 12/17/24 meeting include:
 - Sacramento River flows at Freeport increased to 39,307 cfs and expected to range between 18,000 cfs to 46,000 cfs.
 - San Joaquin River at Vernalis flows are 1,318 cfs and expected to range between 1,000 cfs to 2,000 cfs.
 - Delta Outflow is at 38,400 cfs and expected to range between 20,000 cfs to 50,000 cfs following the First Flush.
 - Clifton Court Forebay (CCF) flows are scheduled to be 7,050 cfs on 12/17 - 12/18/24. Exports are expected to be 600 cfs between 12/19/24 - 1/1/25.
 - QWEST is -487 cfs and expected to range between -500 cfs to 10,000 cfs.
 - Rio Vista flows are currently at 28,000 cfs and are expected to range between 15,000 cfs and 32,000 cfs.
 - SWP share of San Luis Reservoir storage is approximately 895 TAF.
 - CVP share of San Luis Reservoir storage is approximately 505 TAF.
 - Total storage of the San Luis Reservoir is approximately 1,400 TAF.
 - Jones Pumping Plant (JPP) is pumping at a rate of 3,600 cfs. Exports are expected to reduce to 1,800 cfs beginning on 12/19/24.
 - The First Flush daily averages on 12/14 - 12/16/24 were 13, 48, and 101 Formazin Nephelometric Units (FNU) respectively with a three-day average of 54.2 FNU.
 - Questions on Operations:
 - Will language about First Flush be added into the Operational Intent for this week since exports will be reduced on 12/19/24?
 - Operational Intent should include acknowledgement that First Flush was triggered.
 - U.S. Army Corps of Engineers permit provides a physical constraint on the project compared to the operational constraint created by the First Flush.

- Do we anticipate projects will be operating from the -2,000 cfs OMRI in the San Joaquin River?
 - The plan is to operate from the -2,000 cfs OMRI. Health and safety minimums will not be the controlling factor.
- What day will the action conclude?
 - The action will conclude on 1/2/25.
- 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: 65-70% Last week: 75-80%	Current: 30-35% Last week: 20-25%	Current: 0% Last week: 0%
YOY spring-run Chinook salmon	Current: 95-99% Last week: 95-99%	Current: 1-5% 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: 100% Last week: 100%	Current: 0% Last week: 0%	Current: 0% Last week: 0%

Justification for Fish Distribution Estimates

- YOY winter-run Chinook salmon
 - Two winter-run Chinook were observed in the past week; one at Tisdale and one at Knight's Landing.
 - Winter-run Chinook were not observed at the Delta monitoring stations; however, flows and turbidity are both high and winter-run are typically observed in the Delta at this time.
- YOY spring-run Chinook salmon
 - One length-at-date (LAD) spring-run was caught at the Beach Seines. It is still a bit early for them to be migrating downstream into the Delta. At the Spring-run PWT meeting, it was mentioned that spring-run are emerging later than typical so some of the LAD spring-run we are observing in the real-time monitoring stations may be late emerging winter-run.

- YOY hatchery winter-run Chinook salmon
 - No releases of hatchery-origin winter-run have occurred so far this season.
- Natural origin steelhead
 - Typically steelhead are not observed until January; therefore, no change was made to the steelhead distribution this week.

Part 2: Open Discussion on Species Status

Fish Monitoring Updates

- American River Carcass Survey saw approximately 3,500 carcasses last week. The weekly average water temperature was 53.6°F. Of the female carcasses observed last week, 82% were spawned, 5% partially spawned, and 11% were pre-spawn mortalities.

Salvage Update

- Some fish that were observed in salvage over the previous week were clipped late fall-run sized but did not have a CWT code.
- Clipped Chinook salmon were observed at CVP and SWP fish collection facilities this week. All fish were from the 11/20/24 Battle Creek late-fall release which is being used as a spring yearling surrogate trigger.

Hatchery and Collection Facility Operations

- Fish counts at the Skinner Fish Facility on 12/14/24 were reduced from 15:00 to 21:00 due to high fish numbers and an unscheduled flow change at 16:30.

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

- N/A

Items to Raise to WOMT

- N/A

Next SaMT Meeting

- The next SaMT Meeting is scheduled for Tuesday, 1/7/25 at 9 a.m.

Action Items

- N/A