



— BUREAU OF —
RECLAMATION

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 2/28/23 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).

Agenda Items:

1. Introductions
2. Updates on Water Operations and Biological Conditions
3. Open Discussion on Species Status
4. Live-edit Assessments (Proposed Action Assessment and ITP Risk Assessment)
5. Additional Considerations/Other Topics
6. Next Meeting

Agenda Item 2. Updates on Water Operations and Biological Conditions

Reclamation reported on weather conditions noting an active storm pattern with consistent precipitation over the six-day forecast window with a brief break from March 3rd to the 4th. Temperatures are expected to be below average with low elevation freezing levels and heavy precipitation along the north coast, Shasta Basin, and particularly along the spine of the Sierra. Sacramento Valley will see rainfall of approximately 0.3 inches and 0.5 inches in the San Joaquin Basin.

Clear Creek releases from Whiskeytown Dam remain at 200 cfs.

Sacramento River releases from Keswick Dam remain at 3,250 cfs.

Sacramento River flows at Freeport are approximately 20,600 cfs. Flows are expected to increase this week up to 35,000 cfs before decreasing again.

San Joaquin River flows at Vernalis are approximately 5,100 cfs and are expected to increase up to 11,500 cfs during the week. Flows are expected to reach 8,000 cfs in the next 1-2 days.

Clifton Court Forebay (CCF) exports are currently at 2,800 cfs in order to meet the -3,500 OMR objective, but exports are expected to increase with the potential to reach 8,000 cfs later in the week.

Feather River releases from Oroville Dam are currently at 950 cfs and expected to increase to 1,050 cfs as the minimum flow requirements increase in March.

American River releases from Nimbus Dam remain at 4,000 cfs with no change expected.

Stanislaus River releases from Goodwin Dam have increased to 1,500 cfs due to ongoing Tulloch side flow management.

The Delta outflow index is approximately 22,000 cfs and with potential to increase through the week.

Jones Pumping Plant exports are currently at 3,500 cfs with a change order to increase to 4,200 cfs on 3/1/23.

QWEST flow values are approximately +5,700 cfs. Flows may reach the +10,000 cfs range before decreasing again.

Rio Vista flows are approximately 15,000 cfs with the potential to increase up to 30,000 cfs through the week.

The tidal cycle is emerging out of a first quarter neap cycle. The transition to a spring tide coincides with the approaching full moon on 3/7/23.

For details on salvage that occurred in the past week please refer to the Operations Outlook, PA Assessment, and ITP Risk Assessment documents. Additionally, all salvage information can be found online at <https://filelib.wildlife.ca.gov/Public/salvage/>.

Actions Currently in Effect:

- Delta Cross Channel (DCC) Gate operations (PA 4.10.5.3): Gates closed for the season on 11/28/22 to meet LTO Proposed Action. The gates will remain closed until May unless an opening is needed to meet D-1641 water quality requirements.
- OMR Management Season (PA 4.10.5.10.1, COA 8.3.2): Onset of OMR Management season began on 1/1/23 due to the exceedance of the 5% threshold for the winter-run Chinook salmon population presence within the Delta. Old and Middle River (OMR) flows cannot be more negative than -5,000 cfs on a 14-day average. Additional restrictions and changes to operations may be required per the PA and the CDFW Incidental Take Permit (ITP- COA 8.3.2).
- ITP Winter-run Single-year Loss Threshold (COA 8.6.1): DWR will operate Banks Pumping Plant consistent with Condition of Approval 8.6.1 of the ITP. These values are based on the juvenile production estimate (JPE) of 49,924 fish.
 - The ITP natural-origin Winter-run Single-year Loss Threshold for this year is loss of unclipped length-at-date winter-run Chinook salmon from the CVP and SWP

greater than or equal to 1.17% of the winter-run Chinook salmon JPE (loss \geq 584.11). If 50% of the threshold is exceeded (loss \geq 292.06), the required response is to reduce SWP exports by its proportional share, according to the coordinated operations agreement (COA), that would be required to reach a 14-day average OMR of -3,500 cfs. If 75% of this threshold is exceeded (loss \geq 438.08), the required response is to reduce SWP exports by its proportional share, according to the COA, that would be required to reach a 14-day average OMR of -2,000 cfs.

- The ITP hatchery-origin Chinook salmon Single-year Loss Threshold for this year is loss of clipped length-at-date 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 229.15). If 50% of the threshold is exceeded (loss \geq 114.58), the required response is to reduce SWP exports by its proportional share, according to the coordinated operations agreement (COA), that would be required to reach a 14-day average OMR of -3,500 cfs. If 75% of this threshold is exceeded (loss \geq 171.86), the required response is to reduce SWP exports by its proportional share, according to the COA, that would be required to reach a 14-day average OMR of -2,000 cfs.
- ITP Mid- and Late-season Natural Winter-run Chinook Salmon Daily Loss Threshold (COA 8.6.3): DWR will operate Banks Pumping Plant consistent with Condition of Approval 8.6.3 of the ITP. The ITP Daily Loss Threshold for February is loss of older juvenile Chinook salmon from CVP and SWP greater than 0.00991% of the winter-run Chinook salmon JPE (loss $>$ 4.95). The ITP Daily Loss Threshold for March is loss of older juvenile Chinook salmon from CVP and SWP greater than 0.0146% of the winter-run Chinook salmon JPE (loss $>$ 7.29). If the loss threshold is exceeded, the required response is to reduce SWP exports by its proportional share, according to the COA, that would be required to reach an OMR of no more negative than -3,500 cfs for five consecutive days.
 - Amendment to COA 8.6.3 in effect as of 1/20/2023: In water year 2023, Permittee shall restrict exports in response to the initial length-at-date identification of natural older juvenile Chinook salmon and the thresholds described above. If genetic analysis of an individual natural older juvenile Chinook salmon observed in salvage at the SWP or CVP indicates that it is not CHNWR, that individual shall not count toward the daily loss threshold and continued export restrictions under this Condition of Approval are not required if the daily loss threshold has consequently not been met. All genetic analyses shall be conducted using CDFW approved genetic methods.

Weekly Fish and Water Operations Outlook, Current Operations

SaMT reviewed and updated the Outlook document. The updated Outlook document will be distributed to the SaMT via email by close of business (COB) 2/28/23.

SaMT discussed Fish Monitoring Gear Efficiency/Disruptions as addressed within the Operations Outlook and updated accordingly.

SaMT Estimates of Fish Distribution

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 YOY winter-run and YOY spring-run as well as natural origin steelhead at the real-time monitoring locations. These estimates are reported in the final Assessment document, available on the [Delta Monitoring Workgroup](#) webpage.

Location	Yet to Enter Delta	In the Delta	Exited the Delta
Young-of-year (YOY) winter-run Chinook salmon	Current: 5-15% Last week: 10-25%	Current: 70-90% Last week: 65-85%	Current: 5-15% Last week: 5-10%
YOY spring-run Chinook salmon	Current: 43-60% Last week: 48-65%	Current: 40-55% Last week: 35-50%	Current: 0-2% Last week: 0-2%
YOY hatchery winter-run Chinook salmon	Current: 90-95% Last week: 90-99%	Current: 5-10% Last week: 1-10%	Current: 0% Last week: 0%
Natural origin steelhead	Current: 50-65% Last week: 55-70%	Current: 15-40% Last week: 25-35%	Current: 10-20% Last week: 5-10%

Agenda Item 3. Open Discussion on Species Status

Salvage Update:

A LAD winter-run Chinook salmon was observed at the CVP facility on 2/23/23. This LAD winter-run was genetically confirmed to be a true winter-run, which is the first winter-run of the season caught in the salvage facilities.

Unclipped Steelhead were observed at the CVP facility on 2/25/23.

Researchers are continuing to observe fall-run-sized fish at the CVP facility as well as late fall-run clipped fish from Release Group 3.

Multiple clipped hatchery Steelhead were observed at the salvage facilities during the previous week.

Operations:

No reduced counts were reported.

The only interruption in operations was 10 minutes of reduced salvage time to allow for removal of acoustic transmitters at the federal facility.

Beginning the week of 3/6/23, all figures conveying loss totals will use two decimal places.

Agenda Item 4. Live edit Assessments

Proposed Action Assessment

SaMT reviewed and updated the current week's Proposed Action Assessment document. The updated Proposed Action Assessment will be distributed to the SaMT via email by COB 3/1/23. The final assessment will be posted to [Reclamation's Delta Monitoring Workgroup](#) webpage.

ITP Risk Assessment

SaMT discussed the ITP Risk Assessment document. The updated draft ITP Risk Assessment will be distributed via email by COB 2/28/23 for review by SaMT members with comments due COB Thursday 3/2/23. The ITP Risk Assessment will be finalized by COB Friday 3/3/23 and can be found at [CDFW's Water Project Operations](#) webpage.

Agenda Item 5. Additional Considerations/Other Topics

DWR Update and Approval Request:

Kevin Reece, DWR, shared Temporary Urgency Change Order (TUCO) conditions imposed by the state water board that require DWR to provide necessary monitoring and evaluations to fisheries agencies and the state board on a weekly basis. DWR proposed that the weekly SaMT and SMT meetings serve as the venue for the data sharing discussions that inform the Proposed Action Assessment and other informative documents. DWR also requested that the weekly meetings be used for submittal of modeling requests by DWR from SaMT and SMT members. With most senior agency staff absent from the 2/28/23 Joint SaMT/SMT meeting, agency representatives will need to seek approval for this request from their respective leadership staff. SaMT and SMT members can field any questions or concerns through Kevin Reece and/or discuss at the next WOMT meeting.

Genetics results update:

Genetic results revealed that the loach collected at the SWP facility in early February is a pond loach (*misgurnus anguillicaudatus*). The results indicate that there are now two confirmed loach species in the Delta. The salvage unit and Reclamation staff are in discussion about how to most accurately code it in the database.

Machine-learning Model Presentation:

Reclamation is working to coordinate a presentation during an upcoming SaMT meeting on the machine-learning model. A finalized presentation date will be shared with SaMT members once confirmed.

Agenda Item 6. Next Meeting

The next SaMT Meeting is scheduled for Tuesday, 3/7/23, immediately following the Joint Operations & Outlook 9 a.m. meeting.

Action Item: Agency representatives to review the DWR request with their respective leadership staff for approval to use information shared at the weekly SMT and SaMT meetings to update the fisheries agencies and the state board.