



— BUREAU OF —
RECLAMATION

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 3/7/23 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 precipitation this week. Stronger storms are expected beginning 3/9/23 and will last into the weekend. The most favorable areas for precipitation are the Sierra Nevada mountains, which may receive up to 10 inches of precipitation. The valley floor, Sacramento Basin, and San Joaquin River may receive 2-3 inches of precipitation. Slightly warmer air temperatures are expected in contrast to previous weeks and will likely result in increased flow and runoff into the river tributaries and systems before flowing into the Delta.

Clear Creek releases from Whiskeytown Dam are currently at 200 cfs.

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

Sacramento River flows at Freeport are approximately 25,000 – 26,000 cfs. Flows are expected to increase this week up to 50,000 cfs or greater.

San Joaquin River flows at Vernalis are approximately 11,800 cfs and are expected to increase to around 20,000 cfs due to expected precipitation.

Clifton Court Forebay (CCF) exports are currently at 6,700 cfs in order to meet the -5,000 OMR objective, but exports are expected to increase with the potential to reach 9,500 cfs by the weekend. The controlling factor by the end of the week is expected to be export capacity.

Feather River releases from Oroville Dam are currently at 1,050 cfs and expected to increase this week due to anticipated precipitation.

American River releases from Nimbus Dam are currently at 4,000 cfs and may increase to 8,000 cfs with expected precipitation.

Stanislaus River releases from Goodwin Dam are currently at 500 cfs due to ongoing Tulloch side flow management.

The Delta outflow index is approximately 30,200 cfs and with potential to increase up to 75,000 cfs this week.

Jones Pumping Plant exports are currently at 4,200 cfs.

QWEST flow values are approximately +8,000 cfs. Flows are expected to increase significantly on 3/10/23 or 3/11/23.

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

The full moon on 3/7/23 brings the spring tide to a peak but is expected to have minimal impact due to the high precipitation amounts. Beginning 3/14/23, the tidal cycle will begin entering a neap tidal cycle.

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 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.

SaMT reviewed and updated the Outlook document. The updated Outlook document will be distributed to the SaMT via email by close of business (COB) 3/7/23.

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: 5-10% Last week: 5-15%	Current: 70-90% Last week: 70-90%	Current: 5-20% Last week: 5-15%
YOY spring-run Chinook salmon	Current: 34-50% Last week: 43-60%	Current: 45-65% Last week: 40-55%	Current: 1-5% Last week: 0-2%
YOY hatchery winter-run Chinook salmon	Current: 85-95% Last week: 90-95%	Current: 5-15% Last week: 5-10%	Current: 0% Last week: 0%
Natural origin steelhead	Current: 30-70% Last week: 50-65%	Current: 20-50% Last week: 15-40%	Current: 10-20% Last week: 10-20%

Agenda Item 3. Open Discussion on Species Status

Salvage Update:

Older juvenile fish were observed that were previously reclassified using genetic testing. These included winter-run, length-of-date fish reclassified as either spring-run or fall-run, length-of-date fish.

Multiple unclipped Steelhead were observed at both the state and federal facilities during the week of 2/27/23.

The majority of wild Chinook salmon observed this week were LAD fall-run; however, genetically confirmed yearling and LAD YOY juvenile spring-run were also observed over the previous week.

Additional salvage and loss figures can be found in the weekly salmonid salvage report distributed by CDFW.

Operations:

No reduced counts were reported.

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 3/8/23. 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 3/7/23 for review by SaMT members with comments due COB Thursday 3/9/23. The ITP Risk Assessment will be finalized by COB Friday 3/10/23 and can be found at [CDFW's Water Project Operations](#) webpage.

Agenda Item 5. Additional Considerations/Other Topics

Update on Interim Operations:

The interim operations plan (IOP) was in effect as of 2/21/23 in conjunction with the TUCO approval and will be in effect through 12/31/2023. From 2/21/2023 through 12/31/2023, SWP and CVP operations shall comply, as consistent with applicable law, with the interim operations set forth. Reclamation shall adopt the following provisions of DWR's ITP:

- 8.5.2 Larval and Juvenile Delta Smelt Protection
- 8.6.1 Winter-run Single-year Loss Threshold
- 8.6.2 Early-season Natural Winter-run Chinook Salmon Discrete Daily Loss Threshold
- 8.6.3 Mid- and Late-season Natural Winter-run Chinook Salmon Daily Loss Threshold
- 8.6.4 Daily Spring-run Chinook Salmon Hatchery Surrogate Loss Threshold
- 8.7 OMR Flexibility During Delta Excess Conditions
- 8.8 End of OMR Management

This update has also been added to the ITP Risk Assessment documents.

Releases for Condition of Approval 8.6.4:

Spring-run surrogates are scheduled for potential release during the week of 3/13/23, as well as for mid-March and early April 2023. Additional updates from Coleman and Nimbus dams will be provided at the 3/14/23 SaMT meeting, pending availability.

Update on the TUCO Conditions Outcome:

A multi-agency discussion resulted in a shift away from SaMT and SMT as the preferred venues for submittal of modeling requests made to DWR as well as informing the Proposed Action Assessment and other informative documents for the TUCO. Information will be disseminated separately from the packaged documents shared with SaMT and SMT. SaMT members may

contact Kevin Reece, DWR (kevin.reece@water.ca.gov) with requests to receive this separate document.

Review of Genetic Datasets:

DWR clarified details included in the genetic datasets shared with SaMT members on a weekly basis.

In the Group column, fish that are spring-run or winter-run are categorized into one group, with fall-run in another. Winter-run and spring-run are considered “early-migrating;” fall-run are categorized as “late-migrating”.

Scores for Posterior Probability 1 relate to winter or non-winter and typically have a score of 1, indicating clear and distinct categorization. Posterior Probability 2 is the ESA group: spring-run and fall-run. This figure typically shows more variation (e.g., 0.602, 0.609). Any scores above 0.8 indicate good probability, or assurance, of the run type. Posterior Probability 3 scores are circumstantial. Scores below 0.8 provide very little assurance.

Agenda Item 6. Next Meeting

The next SaMT Meeting is scheduled for Tuesday, 3/14/23, immediately following the Joint Operations & Outlook 9 a.m. meeting.