



— BUREAU OF —
RECLAMATION

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 3/28/23 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

Precipitation is expected Tuesday and Wednesday with the Shasta Basin and Sierra Nevada regions expecting the greatest amounts; the Sacramento Basin expects to receive 1-2 inches of precipitation. Below-normal air temperatures are expected to continue into the weekend.

Clear Creek releases from Whiskeytown Dam are currently at 200 cfs and expected to increase for the channel maintenance pulse flow.

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

Sacramento River flows at Freeport are approximately 63,000 cfs and expected to increase slightly before decreasing later in the week.

San Joaquin River flows at Vernalis are approximately 35,700 cfs.

Clifton Court Forebay (CCF) exports are currently at 2,600 cfs.

Feather River releases from Oroville Dam are currently at 15,000 cfs.

American River releases from Nimbus Dam are currently at 7,000 cfs with a range of up to 10,000 cfs in place for flood management.

Stanislaus River releases from Goodwin Dam are currently at 1,500 cfs with a range of 300 cfs to 1,500 cfs in place to allow for fishery egg basket retrieval this week.

The Delta outflow index is approximately 107,000 cfs. Flows are expected to decrease slightly before increasing again later in the week.

X2 is currently < 56 km (west of Martinez).

Jones Pumping Plant exports are currently at 3,500 cfs.

QWEST flow values are approximately +44,000 cfs and will remain above +30,000 cfs through the week.

Rio Vista flows are approximately 50,000 – 60,000 cfs.

OMR values are currently at +10,000 cfs.

The first quarter of the moon's cycle starts 3/28/23 with the tidal cycle currently in a neap cycle. The full moon on 4/5/23 will transition the tidal cycle to a spring tide.

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

- The Interim Operations Plan (IOP) is currently in effect resulting from a court order on 2/28/2023 and will determine operations for the remainder of calendar year 2023. Reclamation shall adopt the following provisions of the SWP 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

- **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 -2,500 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 -2,500 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.
- **ITP Daily Spring-Run Chinook Salmon Hatchery Surrogate Loss Threshold (COA 8.6.4):** From 2/1/2022 – 6/30/2022, DWR will operate Banks Pumping Plant consistent with Condition of Approval 8.6.4 of the ITP. The ITP Hatchery Surrogate Loss Threshold for WY 2023 will include two fall-run release groups from Coleman National Fish Hatchery (CNFH), two spring-run release groups from Feather River Fish Hatchery (FRFH) and one fall-run release group from Nimbus Fish Hatchery (NFH). If cumulative loss from CVP and SWP is greater than 0.25% for any release group (FRFH Group 1: loss >1,828.64; FRFH Group 2: loss > 1,821.47; FRFH Group 3: loss > NA, CNFH Group 1: loss > NA, NFH Group 1: loss > NA), 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 -3,500 cfs for five consecutive days.
- **ITP Export Curtailments for Spring Outflow (COA 8.17):** From 4/1/2023 – 5/31/2023, DWR will reduce exports to achieve the SWP proportional share of export reductions established by the ratio of Vernalis flow (cfs) to combined CVP and SWP exports, scaled by water year type, to provide incidental spring outflow. In an above normal or wet year, the ratio of Vernalis flow to CVP and SWP combined exports shall be 4:1. In wet years, SWP export curtailments required by this Condition of Approval for spring outflow in April and May is limited to 150 TAF. However, DWR will not be required to restrict operations if:
 - If the three-day average Delta outflow is greater than 44,500 cfs, then the SWP shall not be controlled by this COA until the flows drop below 44,500 cfs on a three-day average.
 - Exports are below the minimum health and safety exports of 600 cfs.

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) 3/29/23.

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: 1-3% Last week: 1-5%	Current: 52-69% Last week: 60-79%	Current: 30-45% Last week: 20-35%
YOY spring-run Chinook salmon	Current: 10-30% Last week: 15-39%	Current: 65-80% Last week: 60-75%	Current: 5-10% Last week: 1-10%
YOY hatchery winter-run Chinook salmon	Current: 35-55% Last week: 55-75%	Current: 35-45% Last week: 20-30%	Current: 10-20% Last week: 5-15%
Natural origin steelhead	Current: 20-50% Last week: 20-55%	Current: 25-45% Last week: 25-50%	Current: 25-35% Last week: 20-30%

Agenda Item 3. Open Discussion on Species Status

Salvage Update

The facilities observed wild Steelhead loss on 3/22/23 (17.32 fish) and 3/23/23 (2.72 fish).

No older, juvenile Chinook salmon were observed at either facility.

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

Operations

The SWP reduced counts on 3/22/23 for high fish numbers. The CVP did not report any operational variances for the past week.

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 3/29/23. 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 3/28/23 for review by SaMT members with comments due COB Thursday 3/30/23. The ITP Risk Assessment will be finalized by COB Monday 4/3/23 and can be found at [CDFW's Water Project Operations](#) webpage.

Agenda Item 5. Additional Considerations/Other Topics

N/A

Agenda Item 6. Next Meeting

The next SaMT Meeting is scheduled for Tuesday, 4/4/23, immediately following the Joint Operations & Outlook 9 a.m. meeting.

Action Item: SaMT members with questions about COA 8.17 can contact Bryant Giorgi for clarifications.