

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 5/9/23 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

The Central Valley is experiencing cool and unsettled weather through 5/9/23. Dry conditions and warm air temperatures are expected to start on 5/10/23 and last through the weekend.

Clear Creek releases from Whiskeytown Dam are currently at 625 cfs.

Sacramento River releases from Keswick Dam are currently at 13,000 cfs.

Sacramento River flows at Freeport are approximately 40,400 cfs.

San Joaquin River flows at Vernalis are approximately 28,800 cfs.

Clifton Court Forebay (CCF) exports are currently at 2,000 cfs with a range of 3,000 cfs to 4,000 cfs. CCF is planning to decrease exports to 0 cfs from 5/14 - 5/19 for maintenance.

Feather River releases from Oroville Dam are approximately 7,000 cfs.

American River releases from Nimbus Dam are currently at 8,000 cfs.

Stanislaus River releases from Goodwin Dam are currently at 1,500 cfs.

The Delta outflow index is approximately 65,000 cfs.

X2 is downstream of Martinez (< 56 km).

Jones Pumping Plant exports are currently at 3,500 cfs but will be decreasing later in the week due to an inspection.

QWEST flow values are approximately +31,500 cfs. Flows are expected to remain in the positive range during the weeks ahead.

OMRI daily value is approximately +9,500 cfs.

The current spring tide will transition to a neap cycle on 5/12/23.

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:

- 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 ≥ 584.11). If 50% of the threshold is exceeded (loss ≥ 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 ≥ 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 ≥ 229.15). If 50% of the threshold is exceeded (loss ≥ 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 ≥ 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 May is loss of older juvenile Chinook salmon from CVP and SWP greater than 0.0077% of the winter-run Chinook salmon JPE (loss > 3.84).
 - 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 > 2,204,70, CNFH Group 1: loss > 1,002.24, CNFH Group 2: loss > 5,871.92, 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) 5/10/23.

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. Last week, SaMT discussed WR fish distribution in the upper Sacramento River. CDFW expressed concern with moving the lower end of the range down to 0% for WR yet to enter the Delta until water temperatures increase and WR have not been seen in any of the RST's in the upper river. DWR agreed that since there is more water in the system this year, there is increased side channel habitat for WR to rear in. Reclamation felt that 0% is a real possibility and that the distribution range is to capture the entire group's opinion. Therefore, the range last week was decreased to 0-2%. This week, the upper Sacramento River was further decreased to 0-1% due to the Red Bluff Diversion Dam RST data observing 0 WR in their traps in the previous couple

weeks and many of the upper Sacramento River RST's observing very few WR in the previous few weeks.

Location	Yet to Enter Delta	In the Delta	Exited the Delta
Young-of-year (YOY) winter-run	Current: 0-1%	Current: 1-5%	Current: 95-98%
Chinook salmon	Last week: 0-2%	Last week: 3-10%	Last week: 90-95%
YOY spring-run Chinook salmon	Current: 5-10%	Current: 20-35%	Current: 60-70%
	Last week: 5-10%	Last week: 30-45%	Last week: 50-60%
YOY hatchery winter-run Chinook	Current: 0%	Current: 0%	Current: 100%
salmon	Last week: 0%	Last week: 0-5%	Last week: 95-100%
Natural origin steelhead	Current: 5-15%	Current: 20-40%	Current: 55-65%
	Last week: 5-20%	Last week: 20-45%	Last week: 50-60%

Agenda Item 3. Open Discussion on Species Status

Salvage Update for 5/1/23 – 5/7/23:

No protected categories of wild, older juvenile Chinook salmon were observed in salvage during the reporting period.

Spring-run-sized Chinook salmon (total of 457 wild fish; 482 hatchery fish) were observed at both facilities. Nearly all hatchery fish observed have been from the San Joaquin River Restoration Program; however, CWTs are still being processed and confirmed.

Fall-run-sized Chinook salmon (total of 64 wild fish) were observed at both facilities.

Winter-run-sized Chinook salmon (total of 4 hatchery fish) were observed at both facilities.

No wild or hatchery Steelhead were observed during the reporting period.

No operational variances were reported for this period.

Annual facility maintenance will be performed next week; further information will be incorporated into an upcoming salvage report.

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 5/10/23. The final assessment will be posted to <u>Reclamation's Delta Monitoring Workgroup</u> webpage.

ITP Risk Assessment

SaMT discussed the ITP Risk Assessment document. The updated draft ITP Risk Assessment will be distributed via email by COB 5/9/23 for review by SaMT members with comments due COB Thursday 5/11/23. The ITP Risk Assessment will be finalized by COB Friday 5/12/23 and can be found at CDFW's Water Project Operations webpage.

Agenda Item 5. Additional Considerations/Other Topics

Adam Nanninga, USFWS, reported that Chipps Island caught a fall-run by length of date that had a pink VIE tag attached to its snout, but were unsure of its source. It is possibly a fish from the rotary screw traps upstream from Chipps Island, or originating from Tisdale Weir, where VIE tags have been used this season. Crystal Rigby, CDFW, offered to confirm with staff at Tisdale Weir.

Agenda Item 6. Next Meeting

The next SaMT Meeting is scheduled for Tuesday, 5/16/23, immediately following the Joint Operations & Outlook 9 a.m. meeting.

Action Item: Crystal Rigby, CDFW, to confirm with Tisdale Weir staff if the pink VIE-tagged fish caught at Chipps Island originated from Tisdale Weir.