



— BUREAU OF —
RECLAMATION

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 1/31/23 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

Below-normal air temperatures continue in the Central Valley this week. Anticipated precipitation is expected to favor the North Coast, Shasta Basin, and the Sierra Nevada range to the I-80 corridor. The Sacramento valley floor is expected to receive approximately half an inch of precipitation.

Clear Creek releases from Whiskeytown Dam remain at 200 cfs.

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

Sacramento River flows at Freeport are approximately 26,000 cfs. Flows are expected to decrease through the week.

San Joaquin River flows at Vernalis are approximately 11,800 cfs and expected to decrease to through the week but are expected to remain above 6,000 cfs.

Clifton Court Forebay (CCF) exports will decrease to 7,300 cfs on 1/31/23 and to 5,000 cfs on 2/1/23. Exports may drop as low as 3,500 cfs through the week in order to achieve OMRI no more negative than -3,500 cfs for COA 8.6.3.

Feather River releases from Oroville Dam are currently at 950 cfs with no expected changes this week.

American River releases from Nimbus Dam are currently at 4,000 cfs with potential to decrease later in the week.

Stanislaus River releases from Goodwin Dam are currently at 200 cfs.

The Delta outflow index is approximately 35,000 cfs and expected to decrease through the week.

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

QWEST flow values are approximately +11,000 cfs. Flows are expected to decrease through the week, likely remaining above +5,000 cfs.

X2 has moved inland between Martinez and Port Chicago.

Rio Vista flows are approximately 24,000 cfs and are expected to decrease through the week.

The tidal cycle is emerging from a neap cycle and approaching a spring tide with the upcoming full moon on 2/5/23.

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 January is loss of older juvenile Chinook salmon from CVP and SWP greater than 0.00635% of the winter-run Chinook salmon JPE (loss $>$ 3.17). 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). 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) 1/31/23.

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.

*1-2% of YOY spring-run are estimated to have ‘Exited the Delta’ due to juvenile fall-run Chinook salmon being caught in the Fish Restoration Program’s monitoring sites which is west of Chipps Island. Due to the high flow events that have occurred in the past few weeks, it is likely that fall-run and spring-run Chinook salmon may have been pushed out of the system and are rearing west of Chipps Island. Since fall-run have similar migration patterns as spring-run and catch efficiencies at the FRP sites are very low, it is possible that many spring-run and fall-run are rearing past Chipps Island.

Location	Yet to Enter Delta	In the Delta	Exited the Delta
Young-of-year (YOY) winter-run Chinook salmon	Current: 25-50% Last week: 38-60%	Current: 50-70% Last week: 40-60%	Current: 0-5% Last week: 0-2%
YOY spring-run Chinook salmon	Current: 63-79% Last week: 70-85%	Current: 20-35% Last week: 15-30%	Current: 1-2%* Last week: 0%
YOY hatchery winter-run Chinook salmon	Current: NA Last week: NA	Current: NA Last week: NA	Current: NA Last week: NA
Natural origin steelhead	Current: 75-84% Last week: 83-89%	Current: 15-20% Last week: 10-15%	Current: 1-5% Last week: 1-2%

Agenda Item 3. Open Discussion on Species Status

Salvage Update:

Chinook Salmon -Clipped

Late fall-run Chinook salmon were salvaged at the state facility (weekly salvage = 36) but not at the federal facility between 1/23/23 – 1/29/23.

The seasonal (10/1/22 – present) salvage totals of all adipose-clipped Chinook salmon at the federal facility are 752 (loss = 576.18). While the federal facility salvage total is listed as lower for this week than it was the previous week, the discrepancy is related to a species misidentification: The adipose-clipped Chinook Salmon that was previously reported during the 1600 fish-count (219C; No Beep/No PIT/DNA/Bagged) was changed to a Steelhead (No PIT/DNA/Bagged) after closer inspection of the specimen. Changes were made to the CVO Summary Data Sheet, Operations and Counts Data Sheet (1400-2400), and 1600 Length Sheet. The seasonal (10/1/22 – present) salvage totals of all adipose-clipped Chinook salmon at the state facility are 483 (loss = 2,092.58).

Chinook Salmon – Non-Clipped

Fall run-sized Chinook salmon were salvaged at the federal facility (weekly salvage = 72) but not at the state facility between 1/23/23 – 1/29/23.

Spring run-sized Chinook salmon were salvaged at the federal facility (weekly salvage = 4) but not at the state facility between 1/23/23 – 1/29/23.

Winter run-sized Chinook salmon were salvaged at the federal facility (weekly salvage = 4) but not at the state facility between 1/23/23 – 1/29/23.

The seasonal (10/1/22 – present) salvage totals of all non-clipped Chinook salmon at the federal facility are 328 (loss = 208.26). The seasonal (10/1/22 – present) salvage total of all non-clipped Chinook salmon at the state facility are 25 (loss = 110.74).

Clipped Steelhead

The seasonal (10/1/2022 – present) salvage totals of all adipose-clipped steelhead at the federal facility are 48 (loss= 32.64). The seasonal (10/1/22 – present) salvage total of all clipped Steelhead at the state facility are 27 (loss = 116.91).

Non-clipped Steelhead

Non-clipped Steelhead were salvaged at the federal facility (weekly salvage= 4) but not at the state facility between 1/23/23 – 1/29/23.

The seasonal (10/1/22 – present) salvage total of all non-clipped Steelhead at the federal facility are 20 (loss = 13.60). The seasonal (10/1/22 – present) salvage total of all non-clipped Steelhead at the state facility are 14 (loss = 60.62).

Green Sturgeon

No green sturgeon have been salvaged at either facility for WY 2023.

White Sturgeon

No white sturgeon have been salvaged at either facility for WY 2023.

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 2/1/23. 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 1/31/23 for review by SaMT members with comments due

COB Thursday 2/2/23. The ITP Risk Assessment will be finalized by COB Friday 2/3/23 and can be found at [CDFW's Water Project Operations](#) webpage.

Agenda Item 5. Additional Considerations/Other Topics

Fish and Water Operations Outlook

Nick Bertrand, Reclamation, announced the addition of two sections added to the Fish and Water Operations Outlook:

1. Water Project Operational Intent for the Week – A summary statement of the intent to operate to a 5-day average OMR value in the context of current conditions.
2. Biological Justification – A series of bullets illustrating the key biological information used by DWR and Reclamation to support their proposed operations.

These two sections were added at the request of WOMT and will not be edited by SaMT or SMT. Any related discussions, recommendations, or alternative operation proposals will be captured in the Assessment Documents.

NMFS Annual SJRRP spring-run Tech Memo Presentation

Meiling Colombano, NMFS, provided a brief overview of the NMFS Annual San Joaquin River Restoration Program (SJRRP) Spring-Run Technical Memorandum (Tech Memo).

The 2023 Tech Memo became effective as of 1/15/23 and fulfills three purposes:

1. Address requirements of the Nonessential Experimental Population (NEP) designation for the San Joaquin River Restoration Program, and account for NEP Central Valley (CV) spring-run Chinook salmon observed at the salvage facilities in the Delta;
2. Present accounting methods for 2023 to ensure reintroduction activities of NEP CV spring-run Chinook salmon will not result in more than *de minimus* water supply reductions, additional storage release, or bypass flows on unwilling third parties;
3. Outline the NEP CV spring-run Chinook salmon release and monitoring plans for 2023.

Methods for accounting fish include physical marking and genetic analysis. Colombano also noted that pump operations will likely not be affected by naturally produced, NEP, CV spring-run Chinook salmon originating from the SJRRP Restoration area. This is primarily due to “a call on Friant”, which occurs in drier years when CVP water deliveries from the Delta to the southern San Joaquin Valley are inadequate to meet contract terms. During a call on Friant, water is delivered from Millerton Reservoir and then 100% diverted at Mendota Dam and Sack Dam (both irrigation diversions are currently not screened). A call on Friant occurred from late spring 2022 through summer 2022, and SJRRP Restoration river flows were required to be halted. This resulted in the mainstem San Joaquin River to be disconnected (i.e., dry with the exception of agricultural discharges), from approximately Sack Dam to the confluence of the Merced River (~64 river miles). Under these flow management circumstances, there is an

extremely low probably that naturally-produced, NEP, CV spring-run Chinook salmon would survive past Mendota Dam, which likely results in zero juveniles exiting the SJRRP area. Additional impacts a call on Friant has on the NEP population of CV spring-run Chinook salmon are described in the Tech Memo.

NMFS, in coordination with the SJRRP, started a pilot assessment in 2022, and continued in 2023, to help 1) estimate timing of when naturally-produced, NEP, young-of year (YOY) spring-run Chinook salmon might be observed at the Delta facilities – typically in March/April, and 2) estimate the number of naturally-produced, NEP, YOY spring-run Chinook salmon that might be observed at the facilities in spring of 2023.

The full memo can be found on the [San Joaquin River Restoration website](#). For any questions regarding the Tech Memo or the SJRRP, please contact Meiling at meiling.colombano@noaa.gov.

Agenda Item 6. Next Meeting

The next SaMT Meeting is scheduled for Tuesday, 2/7/23, immediately following the Joint Operations & Outlook 9 a.m. meeting.