

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 1/24/23 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 expecting windy conditions and below-normal air temperatures this week. The Sierra Nevada range may receive up to a quarter inch of precipitation, but otherwise, dry conditions are anticipated.

Clear Creek releases from Whiskeytown Dam remain at 200 cfs.

Sacramento River releases from Keswick Dam are at 3,450 cfs and expected to decrease to 3,250 cfs through the week.

Sacramento River flows at Freeport are approximately 56,000 cfs. Flows are expected to decrease to approximately 40,000 cfs through the week.

San Joaquin River flows at Vernalis are approximately 19,700 cfs and expected to decrease to approximately 13,000 cfs through the week.

Clifton Court Forebay (CCF) exports are currently at 9,500 cfs.

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 7,000 cfs and are expected to decrease through the week, potentially reaching 5,000 cfs.

Stanislaus River releases from Goodwin Dam are currently at 400 cfs and are anticipated to decrease through the week to 200 cfs.

The Delta outflow index is approximately 79,000 cfs and expected to decrease through the week.

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

QWEST flow values are approximately +26,000 cfs. Flows are expected to decrease to a range of +14,000 to +15,000 cfs through the week.

Rio Vista flows are approximately 53,000 cfs and may decrease to 30,000 cfs by next week.

The tidal cycle is approaching a neap cycle on 1/28/23.

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 ≥ 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 -2,000 cfs.
- ITP Mid- and Late-season Natural Winter-run Chinook Salmon Daily Loss Threshold (COA 8.6.3): From 1/1/23 1/31/23, 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. If the threshold is exceeded (loss >3.17), 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.

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) 1/24/23.

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 <u>Delta Monitoring Workgroup</u> webpage.

Location	Yet to Enter Delta	In the Delta	Exited the Delta
Young-of-year (YOY) winter-run	Current: 38-60%	Current: 40-60%	Current: 0-2%
Chinook salmon	Last week: 49-65%	Last week: 35-50%	Last week: 0-1%
YOY spring-run Chinook salmon	Current: 70-85%	Current: 15-30%	Current: 0%
	Last week: 75-90%	Last week: 10-25%	Last week: 0%
YOY hatchery winter-run Chinook	Current: NA	Current: NA	Current: NA
salmon	Last week: NA	Last week: NA	Last week: NA
Natural origin steelhead	Current: 83-89%	Current: 10-15%	Current: 1-2%
	Last week: 88-94%	Last week: 5-10%	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 federal (weekly salvage = 4) and state (weekly salvage = 12) facilities between 1/16/23 - 1/22/23.

Spring-run Chinook salmon were salvaged at the federal (weekly salvage = 12) and state (weekly salvage = 9) facilities between 1/16/23 - 1/22/23.

Winter run-sized Chinook salmon were salvaged at the state facility (weekly salvage = 29) but not at the federal facility between 1/16/23 - 1/22/23.

The seasonal (10/1/22 - present) salvage totals of all adipose-clipped Chinook salmon at the federal facility are 756 (loss = 579.06). The seasonal (10/1/22 - present) salvage totals of all adipose-clipped Chinook salmon at the state facility are 448 (loss = 1941.97).

Chinook Salmon – Non-Clipped

Fall run-sized Chinook salmon were salvaged at the federal facility (weekly salvage = 100) but not at the state facility between 1/16/23 - 1/22/23.

The seasonal (10/1/22 - present) salvage totals of all non-clipped Chinook salmon at the federal facility are 248 (loss = 158.57). The seasonal (10/1/22 - present) salvage total of all non-clipped Chinook salmon at the state facility are 24 (loss = 105.41).

Clipped Steelhead

Clipped Steelhead were salvaged at the federal (weekly salvage= 4) and state (weekly salvage= 4) facilities between 1/16/23 - 1/22/23.

The seasonal (10/1/2022 - present) salvage totals of all adipose-clipped steelhead at the federal facility are 44 (loss= 29.92). 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 state facility (weekly salvage= 6) but not at the federal facility between 1/16/23 - 1/22/23.

The seasonal (10/1/22 - present) salvage total of all non-clipped Steelhead at the federal facility are 16 (loss = 10.88). The seasonal (10/1/22 - present) salvage total of all non-clipped Steelhead at the state facility are 14 (loss = 60.62).

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 1/25/23. 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 1/24/23 for review by SaMT members with comments due COB Thursday 1/26/23. The ITP Risk Assessment will be finalized by COB Friday 1/27/23 and can be found at CDFW's Water Project Operations webpage.

Agenda Item 5. Additional Considerations/Other Topics

An amendment was made to COA 8.6.3, Mid and Late Season Winter-run Daily Loss Threshold on 1/20/23 as a result of an increase in failed hatchery tags. The amendment applies to WY 2023 only. The new language states:

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.

A memo will be distributed to inform the agencies.

SaMT discussed a length-at-date winter-run Chinook salmon that was salvaged on 1/17/23. The fish appeared to be of natural-origin (no clipped adipose-fin), however, a beep was initially detected, so the fish was considered "clipped" and was bagged. The next two processors did not

detect a beep. The fish has been genetically confirmed to be a fall-run Chinook salmon. Since no fall-run Chinook salmon releases have occurred this water year, this fish was likely a natural-origin fall-run Chinook salmon. The fish is being dissected tomorrow to determine if there is a CWT. This fish will count as a salvaged length-at-date winter-run Chinook salmon, +1 towards loss for being bagged. The loss of this fish (5.33) exceeded the daily loss threshold (3.17) for the month of January, which triggers COA 8.6.3 requiring an OMRI of no more negative -3,500 cfs on a 5-day average; however, OMRI was already restricted by COA 8.5.1 Turbidity Bridge Avoidance (triggered on 1/17), which required a 5-day average OMRI of no more negative than -2,000 cfs.

Agenda Item 6. Next Meeting

Action Item: Kristin Begun, NMFS, to coordinate with Kearns & West on presenting the Annual San Joaquin River Restoration Program (SJRRP) Technical Memo at a future SaMT meeting.

The next SaMT Meeting is scheduled for Tuesday, 1/31/23, immediately following the Joint Operations & Outlook 9 a.m. meeting.