

Salmon Monitoring Team (SaMT) Weekly Meeting

Conference call: 4/12/2022 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 Meeting Notes, Proposed Action Assessment, and Fish and Water Operations Outlook 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. Roll Call
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 Relevant Actions and Triggers

The Northern Coast and Northern Sierras are forecasted to receive some light precipitation throughout the week. Central Valley may experience 0.5 inches of precipitation, but it is unlikely to affect inflow in any of the tributaries or streams.

Sacramento River flows at Freeport are 6,400 cfs and decreasing over the next few days.

San Joaquin River flows at Vernalis are currently at 767 cfs and will decrease over the next couple of days.

Stanislaus River releases are currently 200 cfs. The Stanislaus River pulse flows will occur for one month beginning on 4/18/22. Three peak flows will range from 1,000 to 1,250 cfs during the pulse flows.

Delta outflow was approximately 4,900 cfs. Net daily outflow index target is 4,000 cfs under the Temporary Urgency Change Order (TUCO).

Delta exports at Jones Pumping Plant are 900 cfs. Clifton Court Forebay exports are currently 600 cfs.

QWEST was at +136 cfs and X2 is currently located at >81 km.

Tidal cycle is exiting neap tide and transitioning into a spring tide.

The USGS OMR gauge has been experiencing issues and the values provided from the gauge should be used with caution.

On 4/6/22 between 11:00 am and 12:00 pm, Reclamation exercised one of the Delta Cross Channel gates due to maintenance work . The tide reading at the start of gate operation (opening) was 5'9" and 5'5" at the completion of gate operation (closing).

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 [CDFW's Public Data Library](#).

Actions Currently in Effect

- The Temporary Urgency Change Order (TUCO) was approved on 4/4/2022 and will be in effect until 6/30/2022. The TUCO approves the changes described below:
 - Reduces the Delta outflow requirement as measured by the Net Delta Outflow Index (NDOI) from a minimum of 7,100 cubic-feet per second (cfs) on a 3-day running average to 4,000 cfs on a 14-day running average. From May 1 – June 30, unmodified D-1641 includes an offramp to a minimum average flow of 4,000 cfs if the Sacramento River Index is less than 8.1 MAF at the 90% exceedance level.
 - Moves the Western Delta agricultural salinity compliance point on the Sacramento River at Emmaton 2.5 to 3 miles upstream to Threemile Slough.
 - Limits the maximum export rate to 1,500 cfs whenever unmodified D-1641 requirements are not being met.
 - Reduces the minimum monthly average flow requirement on the San Joaquin River at Airport Way Bridge, Vernalis from 710-1,140 cfs (April 1-14 and May 16-June 30) and 3,110-3,540 cfs (April 15 – May 15) to a minimum monthly average of 710 cfs. Pursuant to the National Marine Fisheries Service (2019) Biological Opinion on the Long-Term Operation of the Central Valley Project and State Water Project, Reclamation proposes to operate New Melones Reservoir on the Stanislaus River in accordance with Stepped Release Plan, which includes a spring pulse flow (approximately April 15 – May 15). Reclamation proposes to increase New Melones Reservoir releases and

Stanislaus River flows, if necessary, to meet the proposed Vernalis base flow of 710 cfs.

- The Interim Operations Plan (IOP) is currently in effect resulting from a court order on 3/11/22 and will determine operations for the remainder of WY 2022. Federal and State management are discussing how the IOP will affect the SaMT's weekly requirements. 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): The DCC gates were closed on 11/30/21 and are expected to remain closed through mid-May 2022. Positive impacts include preventing routing of listed fish through the DCC into the interior Delta. From February 1 to May 20, the DCC gates will be closed, consistent with D-1641. From May 21 to June 15, the DCC gates will be closed for a total of 14 days, consistent with D-1641.
- OMR Management Season (PA 4.10.5.10.1; COA 8.3.2): Onset of OMR Management season began on 1/1/22 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 SWP Incidental Take Permit (ITP)
- 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.
 - 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 juvenile production estimate (JPE). If 50% of the threshold is exceeded (loss >731.47), 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 >1,097.21), 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. If 50% of the threshold is exceeded (loss > 90.93), 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 > 136.39), 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 Older Juvenile Daily Loss Threshold (COA 8.6.3): From 4/1/22 – 4/30/22, DWR will operate Banks Pumping Plant consistent with Condition of Approval 8.6.3 of the ITP. The ITP Daily Loss Threshold for April is loss of older juvenile Chinook salmon from CVP and SWP greater than 0.00507% of the winter-run Chinook salmon JPE. If the threshold is exceeded (loss >6.34), 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.
- ITP Daily Spring-Run Chinook Salmon Hatchery Surrogate Loss Threshold (COA 8.6.4): From 3/1/22 – 6/30/22, 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 2022 will include four fall-run release groups from Coleman National Fish Hatchery (CNFH) and two spring-run release groups from Feather River Fish Hatchery (FRFH). If cumulative loss from CVP and SWP is greater than 0.25% for any release group (CNFH Group 1: loss >1,799.60; CNFH Group 2: loss >1,873.42; CNFH Group 3: loss >2,646.10, CNFH Group 4: loss >847.74, FRFH Group 1: loss >1823.00), 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.

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) 4/12/22.

Due to ongoing drought conditions, Nimbus Fish Hatchery fall-run Chinook salmon releases are likely to be released in the Bay and will not meet the needs for ITP Condition 8.6.4. To satisfy ITP Condition 8.6.4, CDFW and DWR agreed to substitute two fall-run Chinook salmon release groups from Coleman National Fish Hatchery in place of fall-run releases from Nimbus Fish Hatchery.

The 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. These estimates are reported in the final Assessment document, available on [Reclamation's Salmon Monitoring Team](#) 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: 47-69% Last week: 65-79%	Current: 30-50% * Last week: 20-30%
YOY spring-run Chinook salmon	Current: 5-10% Last week: 10-20%	Current: 70-85% Last week: 70-89%	Current: 10-20% Last week: 1-10%
YOY hatchery winter-run Chinook salmon	Current: 20-30% Last week: 65-79%	Current: 20-45% Last week: 16-23%	Current: 35-50% Last week: 5-12%
Natural origin steelhead	Current: 5-10% Last week: 25-45%	Current: 45-60% Last week: 35-45%	Current: 30-50% Last week: 20-30%

*This increase is based on historic numbers as opposed to current observations of fish movement

Agenda Item 3. Open Discussion on Species Status

N/A

Agenda Item 4. Live edit Assessments

Proposed Action Assessment

SaMT reviewed and updated the current week's PA Assessment document. The updated PA Assessment will be distributed to the SaMT via email by COB 4/12/22. The final assessment will be posted to [Reclamation's Salmon Monitoring Team](#) webpage.

ITP Risk Assessment

SaMT discussed the ITP Risk Assessment document. The updated draft ITP Assessment will be distributed via email by COB 4/12/22 for review by SaMT members with comments due COB Friday 4/15/22. The ITP Risk Assessment will be finalized by Friday 4/15/22 and can be found at [CDFW's Water Project Operations webpage](#).

Agenda Item 5. Additional Considerations/Other Topics

No additional considerations for WOMT were noted.

DWR will only be sending an updated CWT salvage table to SaMT members if observations have occurred associated with any ITP or PA conditions.

Agenda Item 6. Next Meeting

The next SaMT Meeting is scheduled for Tuesday, 4/19/22, at 9 a.m.