Salmon Monitoring Team (SaMT) Weekly Meeting

Conference call: 5/10/2022 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

Precipitation is occurring on the northern valley floor, northern coastal areas, and on the spine of the Sierra. The precipitation is not expected to affect downstream tributaries.

Sacramento River flows downstream from Keswick Dam are currently 3,250 cfs and will increase to 3,500 cfs on 5/11/2022. Flows at Freeport have been fluctuating and are currently 6,200 cfs.

American River releases out of Nimbus Dam are currently at 1,500 cfs and will be monitored based on the spring tide.

Feather River releases out of Oroville Dam have increased since last week and are currently at 2,200 cfs.

San Joaquin River flows at Vernalis are being affected by the Stanislaus River spring pulse flows and are currently at 1,100 cfs.

Goodwin Dam, on the Stanislaus River, is currently releasing water for the spring pulse flow with flows ranging from 500 cfs to 800 cfs. The spring pulse period will end 5/18/2022 resulting in a decrease in flows and some uncertainty in where flows will end up when the pulse period ends.

Delta exports at Jones Pumping Plant are 900 cfs with no anticipated changes. Clifton Court Forebay exports are currently 300 cfs and will increase to 600 cfs on 5/11/2022. Banks Pumping Plant will be offline from 5/1/2022 to 5/20/2022 for maintenance. Fish salvage at Skinner Fish Facility will not occur. Exports into Clifton Court Forebay and from Jones Pumping Plant will continue

Combined Delta outflow on 5/9/2022 was 4,100 cfs

QWEST was at +800 cfs on 5/9/2022 and was close to 0 cfs over the weekend. QWEST will likely fluctuate between 0 cfs and 1,000 cfs throughout the week due to the pulse flow occurring on the Stanislaus River.

The tidal cycle is at the base of a neap cycle and will move into a strong spring tide. Operations will be focused on mitigating the effects of the spring tide to maintain water quality.

Delta Cross-Channel (DCC) Gates remain closed; however, operations may begin around 5/21/2022 based on the D-1641 requirements.

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 3/11/2022 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
- DCC Gate operations (PA 4.10.5.3): The DCC gates were closed on 11/30/2021 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 1/01/2022 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)

- <u>ITP Winter-run Single-year Loss Threshold (COA 8.6.1)</u>: 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 5/01/2022 5/31/2022, 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. If the threshold is exceeded (loss >9.63), 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 3/01/2022 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 2022 includes four fall-run release groups from Coleman National Fish Hatchery (CNFH) and one 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) 5/10/2022.

Due to ongoing drought conditions, Nimbus Fish Hatchery fall-run and Feather River spring-run (Group 2) releases will be released in the Bay and will not meet the needs for ITP Condition 8.6.4. Feather River SR Hatchery Surrogate release (Group 2) will occur on 5/10/2022 and 5/11/2022 in San Pablo Bay.

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. SaMT provides distribution estimates in five percent increments when feasible. 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	Current: 0-1%	Current: 4-20%	Current: 80-95%
Chinook salmon	Last week: 0-1%	Last week: 9-30%	Last week: 70-90%
	Current: 1-10%	Current: 10-39%	Current: 60-80%
YOY spring-run Chinook salmon	Last week: 5-10%	Last week: 20-45%	Last week: 50-70%
YOY hatchery winter-run Chinook	Current: 0%	Current: 0%	Current: 100%
salmon	Last week: 0%	Last week: 0-1%	Last week: 99-100%
	Current: 1-5%	Current: 15-30%	Current: 65-84%
Natural origin steelhead	Last week: 5-10%	Last week: 15-30%	Last week: 60-80%

Agenda Item 3. Open Discussion on Species Status

Genetic results were sent out via email on 5/10/2022 after the SaMT meeting concluded. A winter-run Chinook salmon that was observed at SWP on 4/16/2022 at 1500 hours (loss of 17.57) has been genetically confirmed as a steelhead.

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 5/10/2022. The final assessment will be posted to <u>Reclamation's Salmon Monitoring Team</u> webpage.

ITP Risk Assessment

SaMT discussed the ITP Risk Assessment document. The updated draft ITP Assessment will be distributed via email by COB 5/10/2022 for review by SaMT members with comments due COB Thursday 5/12/2022. The ITP Risk Assessment will be finalized by Friday 5/13/2022 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.

Agenda Item 6. Next Meeting

The next SaMT Meeting is scheduled for Tuesday, 5/17/2022, at 9 a.m.