Salmon Monitoring Team (SaMT) Weekly Meeting

Conference call: 3/23/2021 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 US 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

Delta Cross Channel (DCC) Gate operations: The DCC gates were closed on 12/1/20 and are expected to remain closed through mid-May 2021. Positive impacts include preventing routing of listed fish through the DCC into the interior Delta.

OMR Management Season: Onset of OMR Management season began on 1/1/21 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 Proposed Action (PA) and the CDFW Incidental Take Permit (ITP).

ITP Winter-run Single-year Loss Threshold: 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 length-at-date natural-origin winter-run Chinook salmon from the CVP and SWP greater than or equal to 1.17% of the natural winter-run Chinook salmon juvenile production estimate (JPE)¹. The ITP hatchery-origin Winter-run Single-year Loss Threshold for this year is loss of length-at-date hatchery-origin winter-run Chinook salmon from the CVP and SWP greater than or equal to 0.12%

¹ The IEP Winter-run Chinook Salmon Project Work Team JPE Subteam finalized a winter-run JPE on 1/15/2021, a final letter was issued by NMFS to Reclamation on 1/25/2021, and a final letter was issued by CDFW to DWR on 1/26/2021.

of the hatchery production winter-run Chinook salmon JPE². If 50% of either threshold is exceeded, 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 either 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 a 14-day average OMR of -2,500 cfs.

ITP Daily Loss Threshold: From 3/1/21 - 3/31/21, DWR will operate Banks Pumping Plant consistent with Condition of Approval 8.6.3 of the ITP. The ITP Daily Loss Threshold for March is loss of natural older juvenile Chinook salmon from CVP and SWP greater than or equal to 0.0146% of the natural winter-run Chinook salmon JPE¹. If the 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 -3,500 cfs for five consecutive days.

ITP Spring-run Hatchery Surrogate Loss Threshold: From 3/1/21 - 6/30/21, DWR will operate Banks Pumping Plant consistent with Condition of Approval 8.6.4 of the ITP. The ITP Hatchery Surrogate Loss Threshold tentatively³ includes a minimum of six release groups, including fall-run and spring-run releases from Coleman National Fish Hatchery, Feather River Fish Hatchery, and Nimbus Fish Hatchery. If cumulative loss from CVP and SWP is greater than 0.25% for any release group, 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) 3/23/21.

The DCC gates remain closed and construction on the gates is still underway. There are no other updates at this time.

Fish monitoring locations from the lower Sacramento River to Chipps Island used in the Proposed Action assessment includes Tisdale Weir RST, Knight's Landing RST, Sacramento Beach Seines (combined), Sacramento Trawls, and Chipps Island Trawls

The SaMT discussed Fish Monitoring Gear Efficiency/Disruptions as addressed within the Operations Outlook and updated accordingly. A number of disruptions were noted this week due to COVID-19 related issues.

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 <u>Reclamation's Salmon Monitoring Team</u> webpage

Location	Yet to Enter Delta	In the Delta	Exited the Delta
Young-of-year (YOY) winter-run	Current: 5-10%	Current: 55-70%	Current: 25-35%
Chinook salmon	Last week: 5-10%	Last week: 65-75%	Last week: 20-25%

² The single-year loss threshold and loss tracking for hatchery winter-run Chinook salmon does not include releases into Battle Creek

³ The release groups identified in the WY 2021 Implementation Plan are tentative pending hatchery production and in river release locations. COA 8.6.4 only applies to in-river hatchery surrogate release groups; therefore, hatchery surrogate release groups are tentative until release locations are determined for WY 2021.

Location	Yet to Enter Delta	In the Delta	Exited the Delta
YOY spring-run Chinook salmon	Current: 15-25%	Current: 75-80%	Current: 0-5%
	Last week: 25-30%	Last week: 70-75%	Last week: 0%
YOY hatchery winter-run Chinook	Current: 30-65%	Current: 20-40%	Current: 15-30%
salmon ⁴	Last week: 35-60%	Last week: 30-45%	Last week: 10-20%
Natural origin steelhead	Current: 25-35%	Current: 35-50%	Current: 25-30%
	Last week: 30-40%	Last week: 35-50%	Last week: 20-25%

Agenda Item 3. Open Discussion on Species Status

Approximately 50 acoustic tagged spring-run Chinook Salmon were detected at Tower Bridge from the 3/19/21 Feather River Hatchery release group. No acoustic tagged fish from this release have been detected at Georgiana Slough..

Acoustic tagged hatchery winter-run Chinook salmon production fish from the 1/30/21 releases are still being detected at the Tower Bridge receiver array as well as at the Benicia Bridge location.

Acoustic tagged hatchery winter-run Chinook salmon from the first two Battle Creek jumpstart releases (3/8 and 3/10/21) have been detected at the Tower Bridge receiver array. No fish from the third release (3/18/21) have been detected at the Tower Bridge location. No fish from any release group have been detected at receiver locations farther downstream.

Agenda Item 4. Live edit Assessments

Proposed Action Assessment

SaMT reviewed and updated the PA Assessment document. The updated PA Assessment will be distributed to the SaMT via email by COB 3/23/21. 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 by CDFW via email by COB 3/24/21 for review by SaMT members with comments due COB Thursday, 3/25/21. The ITP Risk Assessment will be finalized by Friday, 3/26/21 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.

The next SaMT Meeting is scheduled for Tuesday, 3/30/21, at 9 a.m.

⁴ Estimation of YOY hatchery winter-run Chinook Salmon distribution is complicated by multiple releases over long period of time including upcoming additional releases.