Salmon Monitoring Team (SaMT) Weekly Meeting

Conference call: 4/13/2021 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 Old and Middle River (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. 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 JPE[2]. 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 4/1/21 - 4/30/21, 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 natural older juvenile Chinook salmon from CVP and SWP greater than or equal to 0.0507% of the natural winter-run Chinook salmon JPE[1]. 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 includes five release groups, including two release groups of fall-run Chinook salmon from Coleman National Fish Hatchery and two release groups of spring-run Chinook salmon from Feather River 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) 4/13/21.

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: 5% Last week: 5%	Current: 30-40% Last week: 40-50%	Current: 55-65% Last week: 45-55%
YOY spring-run Chinook salmon	Current: 5-10% Last week: 5-10%	Current: 70-85% Last week: 75-90%	Current: 10-20% Last week: 5-15%
YOY hatchery winter-run Chinook salmon [3]	Current: 10-15% Last week: 10-45%	Current: 25-50% Last week: 25-45%	Current: 40-60% Last week: 30-45%
Natural origin steelhead	Current: 10-20% Last week: 15-25%	Current: 35-50% Last week: 35-50%	Current: 40-45% Last week: 35-40%

[2] The single-year loss threshold and loss tracking for hatchery winter-run Chinook salmon does not include releases into Battle Creek.
[3] Estimation of YOY hatchery winter-run Chinook Salmon distribution is complicated by multiple releases over a prolonged period of time .

Agenda Item 3. Open Discussion on Species Status

The SaMT discussed survival rates for winter-run Chinook salmon noting poor survival and the potential for a bad year overall despite starting off with good winter-run juvenile production rates: only 10% of the overall acoustic tagged hatchery winter-run Chinook salmon production fish made it to Sacramento from the upstream release location and only 3.6% of all release groups made it to Benicia. Currently, it appears that 5% or less of any winter-run acoustic tagged study fish releases are exiting the Delta past the Benicia Bridge receivers. This includes hatchery spring-run Chinook salmon and Battle Creek jumpstart winter-run Chinook salmon,

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 4/13/21. 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 4/14/21 for review by SaMT members with comments due COB Thursday, 4/15/21. The ITP Risk Assessment will be finalized by Friday, 4/16/21 and can be found at CDFW's Water Project Operations webpage.

Agenda Item 5. Additional Considerations/Other Topics

CDFW noted that it's FTP site is currently unavailable to the public and is working with IT support to re-establish online public access to their FTP site, where salvage data is recorded. CDFW is anticipating that this will be accomplished by the end of the week.

SaMT members discussed a need for a real-time adjustment in the winter-run Chinook salmon JPE (e.g., using current acoustic telemetry data associated with release groups). The group suggested this discussion on how JPEs could be improved in future years may be appropriate for a non-flow charter, LTO management, or winter-run Chinook salmon JPE project work team venue.

No additional considerations for WOMT were noted.

Agenda Item 6.

The next SaMT Meeting is scheduled for Tuesday, 4/20/21, at 9 a.m.