



Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 10/11/22 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. Introductions
2. Presentation by Jereme Gaeta, CDFW, Trinh Nguyen, CDFW, and Brian Mahardja, USBR
3. Updates on Water Operations and Biological Conditions
4. Open Discussion on Species Status
5. Live-edit Assessments (Proposed Action Assessment and ITP Risk Assessment)
6. Additional Considerations/Other Topics
7. Next Meeting

Agenda Item 2. Presentation

Jereme Gaeta, CDFW, Trinh Nguyen, CDFW, and Brian Mahardja, USBR, presented on Understanding and Predicting Winter-run Salvage using a Machine Learning Framework. The research intended to answer the question: Can salvage be predicted before winter-run Chinook salmon are detected at the water projects?

The machine learning model used the algorithm XGB-DART, which is tree-based, non-parametric, and non-linear. Model outputs represented three classifications: Absence, Low Presence, and High Presence [of fish] and can produce one-week and three-week outlooks. Researchers reported overall satisfaction with the model's accuracy:

- 92% correctly predicting Absence
- 82% correctly predicting Low Presence

- 90% correctly predicting High Presence

Team members inquired about incorporation of the machine learning model into SaMT meetings, but researchers cited that it will be more useful starting in the winter months. It was suggested to alert SaMT when the web tool is ready for use.

Additional inquiries can be sent to Gaeta at Jereme.gaeta@wildlife.ca.gov.

Agenda Item 3. Updates on Water Operations and Biological Conditions

The forecast is showing warm, dry weather this week with an anticipated cooling trend by the weekend.

The Sacramento River and Delta are showing some water temperature-related concerns that are causing uncertainties in operation.

Clifton Court Forebay (CCF) exports are at 500 cfs with no anticipated change this week.

Feather River releases will slightly decrease this week and remain below 2,500 to allow for additional flexibility later in the season until additional inflow is received.

Nimbus Dam, on the American River may decrease flows but it is uncertain when that will occur.

Fall pulse flows on the Stanislaus River are scheduled to begin on 10/12/2022 with some cycling occurring between pulses.

San Joaquin River flows at Vernalis are expected to increase over the next week.

It is unclear if Delta exports from Jones Pumping Plant will be adjusted.

QWEST was approximately 2,000 cfs when the Delta Cross Channel (DCC) gates were open over the weekend. Now that the DCC gates have closed, QWEST is approximately -3,400 cfs. QWEST and Rio Vista flows are dependent upon the opening and closing of the Delta Cross Channel (DCC) gates. The primary concern is balancing the Rio Vista flows with the water quality 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 <https://filelib.wildlife.ca.gov/Public/salvage/>.

Actions Currently in Effect

- Delta Cross Channel (DCC) Gate operations (PA 4.10.5.3): The DCC gates are planned to close during the week and open on the weekends. The gate schedule is subject to change due to flow or water quality concerns. Delta operations are looking for the balance between the flow and salinity requirements. Closed DCC gates push a higher volume of water through the Sacramento River to better meet the Rio Vista requirement. Open DCC gates allow for a refresh of higher quality water to meet the salinity requirements in the interior Delta.

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) 10/11/22.

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. Only estimation of juvenile natural winter-run Chinook Salmon was discussed this week. These estimates are reported in the final Assessment document, available on [Reclamation’s Salmon Monitoring Team](#) webpage. Many of the rotary screw traps (RSTs) are not operational yet due to high water temperatures; therefore, estimates this week are mostly based on winter-run (WR) passage at Red Bluff Diversion Dam RST.

Location	Yet to Enter Delta	In the Delta	Exited the Delta
Young-of-year (YOY) winter-run Chinook salmon	Current: 100% Last week: 100%	Current: 0% Last week: 0%	Current: 0% Last week: 0%
YOY spring-run Chinook salmon	Current: NA Last week: NA	Current: NA Last week: NA	Current: NA Last week: NA
YOY hatchery winter-run Chinook salmon	Current: NA Last week: NA	Current: NA Last week: NA	Current: NA Last week: NA
Natural origin steelhead	Current: NA Last week: NA	Current: NA Last week: NA	Current: NA Last week: NA

Agenda Item 4. Open Discussion on Species Status

N/A

Agenda Item 5. 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 10/11/22. The final assessment will be posted to [Reclamation’s Salmon Monitoring Team](#) webpage.

ITP Risk Assessment

The ITP Risk Assessment will begin distribution on 11/1/2022, unless real-time monitoring stations begin to see an increase in winter-run Chinook passage due to weather conditions or other factors.

Agenda Item 6. Additional Considerations/Other Topics

Reclamation to add representatives from DWR, CDFW, and NMFS to the GCID distribution list.

CDFW received feedback that management does not want the SaMT Fish Distribution Estimates and OMR Offramp Language included in the guidance document. Request to save this document in both the [Kearns & West Teams](#) site and potentially add a separate Reclamation site for those who cannot access the Kearns & West version.

- If experiencing difficulty with accessing the existing Teams site, please send any documents to be shared to Bethany (btaylor@kearnswest.com) and Mia (mschiappi@kearnswest.com) for posting.

Agenda Item 7. Next Meeting

The next SaMT Meeting is scheduled for Tuesday, 10/18/2022, at 9 a.m.