



Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 6/4/24 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 Proposed Action Assessment, and Fish and Water Operations Outlook will be posted to [Reclamation's Delta Monitoring Work Group](#) webpage, while final version of the Meeting Notes 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. Housekeeping
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. Items to Raise to WOMT
8. Next Meeting

Agenda Item 2. Housekeeping

WY 2024 Wrap-Up Meeting

- Kearns & West proposed a wrap-up meeting for the WY 2024 season. Scheduling options include:
 - Add this meeting on to the last regular meeting of the season;
 - Schedule an ad hoc meeting;
 - Schedule an in-person meeting, potentially followed by a social hour.

- DWR and CDFW expressed general support for conducting a wrap-up meeting.

SaMT Teams Site

- Kristin Begun, NMFS, has been having trouble accessing SaMT Teams site; this has historically been an issue for NMFS employees.
 - Kearns & West re-added Begun to the site.
- NMFS suggested the possibility of editing meeting notes on SharePoint beginning in Water Year (WY) 2025. This will be discussed further at the WY 2024 wrap-up meeting.

Agenda Item 3. Updates on Water Operations and Biological Conditions

- The Fish and Water Operations Outlook document was reviewed. Please refer to the Operations Outlook, PA Assessment, and ITP Risk Assessment documents. All flows and releases, unless otherwise noted, are reported as approximated daily averages.
- A final pulse flow for Clear Creek is scheduled for the week of 6/17/24; final scheduling will be confirmed next week.
- Feather River releases are expected to vary this week in order to meet the objective to keep the reservoir full.
- Sacramento River flows at Freeport were 16,050 cfs on 6/3/24 and are expected to decrease through the week.
- San Joaquin River flows at Vernalis were 4,200 cfs on 6/3/24 and are expected to decrease down to 3,000 cfs over the next few days.
- The Delta outflow index was 14,800 cfs and is expected to decrease through the week.
- Rio Vista flows were at 9,000 cfs as of 6/3/24 and may increase up to 13,000 cfs when the DCC gates close.
- QWEST flow values were +5,800 cfs on 6/3/24 and are expected to range between +4,000 cfs to -1,000 cfs.
- Questions
 - CDFW requested to replace “LTO” in the Water Project Operational Intent section of the Fish & Water Operations Outlook with the 2019 BiOp to avoid confusion since new BiOp’s are being written and discussed at this time.
 - 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

- The Interim Operations Plan (IOP) is currently in effect resulting from a court order issued on 4/1/2024 and in effect until 12/20/2024. 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):** See Outlook and Assessment for more information.
 - **ITP Winter-run Single-year Loss Threshold (COA 8.6.1):** DWR and Reclamation will operate Banks Pumping Plant consistent with Condition of Approval 8.6.1 of the ITP. These values are based on the juvenile production estimate (JPE). The final JPE for brood year 2023 natural-origin winter-run Chinook salmon has been estimated at 234,896. The thresholds below are based on the final JPE.
 - The ITP natural-origin Winter-run Single-year Loss Threshold for this year is loss of unclipped length-at-date (LAD) winter-run Chinook salmon from the CVP and SWP greater than or equal to 1.17% of the winter-run Chinook salmon JPE (loss \geq 2,748.28). If 50% of the threshold is exceeded (loss \geq 1,374.14), the required response would be to reach a 14-day average OMR of -3,500 cfs. If 75% of this threshold is exceeded (loss \geq 2,061.21), the required response would be to reach a 14-day average OMR of -2,500 cfs. If 100% of this threshold is exceeded (loss \geq 2,748.28), the required response is to immediately convene SaMT to review recent fish distribution information and operations and provide advice regarding future planned Project operations to minimize subsequent loss during that year.
 - The ITP hatchery-origin Chinook salmon Single-year Loss Threshold for this year is loss of clipped LAD 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 (loss \geq 232.30). If 50% of the threshold is exceeded (loss \geq 116.15), the required response would be to reach a 14-day average OMR of -3,500 cfs. If 75% of this threshold is exceeded (loss \geq 174.23), the required response would be to reach a 14-day average OMR of -2,500 cfs.

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) 6/5/24.
- 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. Estimates this week are based on YOY winter-run and YOY spring-run as well as natural origin steelhead at the real-time monitoring locations. These estimates are reported in the final Assessment document, available on the [Delta Monitoring Workgroup](#) webpage.

Location	Yet to Enter Delta	In the Delta	Exited the Delta past Chipps Island
Young-of-year (YOY) winter-run Chinook salmon	Current: 0% Last week: 0%	Current: 0-1% Last week: 0-2%	Current: 99-100% Last week: 98-100%
YOY spring-run Chinook salmon	Current: 1-2% Last week: 5-10%	Current: 1-3% Last week: 5-15%	Current: 95-98% Last week: 75-90%
YOY hatchery winter-run Chinook salmon	Current: 0% Last week: 0%	Current: 0% Last week: 0%	Current: 100% Last week: 100%
Natural origin steelhead	Current: 1-5% Last week: 5-10%	Current: 9-15% Last week: 5-20%	Current: 80-90% Last week: 75-85%

Rationale for Distribution

- Wild winter-run Chinook Salmon
 - CDFW recommended waiting until water temperatures reach 22.2°C (72°F) to estimate complete winter-run passage through Chipps Island. However, it was previously noted that according to SacPAS historical estimates, 100% of winter-run Chinook salmon have typically passed Chipps Island by this time, including in wetter years. The total in the Delta estimation was reduced to 0-1%, and total exited the Delta increased to 99-100%.
- Wild spring-run Chinook Salmon
 - Spring-run Chinook salmon have not been seen in the rotary screw traps (RSTs) this week, and delayed data from last week showed no spring-run in the Delta (none observed at the beach seines, Sacramento-area trawls, or Chipps Island). CDFW estimated that most spring-run have exited the system at this point in the season and many have likely been pushed out due to a rise in water temperatures over the past few days. RBDD RST information was still not available so CDFW suggested leaving 1-2% in the upper Sacramento River (Yet to Enter) until that data is obtained. SaMT estimated that the range of natural-origin spring-run exited the Delta increased this week to a total of 95-98%. The estimation of fish in the Delta was decreased to 1-3%.
- Hatchery winter-run Chinook Salmon
 - CalFishTrack has not revealed any detections of hatchery winter-run Chinook salmon during the previous few weeks. SaMT estimates that all have exited the Delta at this point in the season.

- Natural-origin Steelhead
 - Reclamation shared that the number of observed steelhead has been decreasing recently. SaMT estimated an additional 5% have migrated past Chipps Island for a total of 80-90% for fish that have exited the Delta. The percentage of steelhead yet to enter the Delta was decreased to 1-5%.

Agenda Item 4. Open Discussion on Species Status

Salvage Update for 5/27 – 6/2/24

- Salvage and loss totals are detailed in the salvage update shared via email. Please refer to the email for specific figures.
- The facilities are still observing spring-run length-at-date (LAD) and fall-run LAD unclipped Chinook salmon in salvage.
- No hatchery-origin Chinook salmon were collected this week.
- The facilities are still seeing a few hatchery steelhead in salvage.

Operations

- No outages or reduced counts were reported.

Agenda Item 5. Live-Edit Assessments

Proposed Action Assessment

- SaMT reviewed and updated the current week's Proposed Action Assessment document. The updated Proposed Action Assessment will be distributed to the SaMT via email by COB 6/5/24. The final assessment will be posted to Reclamation's [Delta Monitoring Workgroup](#) webpage.

ITP Risk Assessment

- The draft ITP Risk Assessment will be distributed on 6/4/24 with comments due COB Thursday (6/6/24). A final version will be distributed Friday (6/7/24). Past ITP Risk Assessments can be found at [CDFW's Water Project Operations](#) webpage.

Agenda Item 6. Additional Considerations/Other Topics

Discussion on OMRI Ranges

- Reclamation shared that the potential proposal for this week's OMRI range is between -3,500 cfs and -5,000 cfs.
- CDFW requested that SaMT discussion include comparisons of the risks associated with the proposed operational scenarios. CDFW believes that there are different sets of potential risks associated with each scenario, i.e., operational range.
 - SaMT then reviewed the latest Tillotson model results for natural-origin steelhead that showed a greater estimated loss of steelhead at an OMRI of -5,000 cfs.
 - NMFS and CDFW altered their recommendation language; this is included under Agenda Item 7.

- CDFW requested scheduling an ad hoc meeting if a winter-run Chinook salmon is observed in the salvage facilities under the proposed OMRI target of -5,000 cfs.

Agenda Item 7. Items to Raise to WOMT

NMFS

- NMFS and CDFW recommend targeting a more positive OMRI (-3,500 cfs) to be most protective of CCV steelhead that are still present in the Delta. We have observed a large number of steelhead this season, and when exports increase, we tend to see salvage increase. Until steelhead have migrated out of the system, a risk to steelhead is still present, and targeting a more negative OMRI (-5,000 cfs) would not be beneficial to steelhead and would likely result in greater loss of steelhead. Maintaining a more positive OMRI would also benefit any remaining spring-run still present in the system.

CDFW

- CDFW assumes that winter-run presence in June is unlikely according to historical data and seasonal timing of winter-run. Operating to -3,500 cfs OMRI for the first couple days of June has not increased LAD WR entrainment; therefore, CDFW believes that offramping COA 8.6.1 and operating to -5,000 cfs OMRI would provide enough protections for LAD WR. CDFW prefers to meet and discuss LAD WR distribution and OMRI changes if a LAD WR is observed in salvage before OMR Management season ends. This recommendation is specific to winter-run and does not incorporate the entrainment risk for steelhead or spring-run Chinook salmon, which would benefit from a more positive OMRI.

Reclamation

- Reclamation is elevating changes from the OMRI range of -3,500 cfs to -5,000 cfs listed in the Fish & Water Operations Outlook to WOMT for further consideration.

Agenda Item 8. Next Meeting

- The next SaMT Meeting is scheduled for Tuesday, 6/11/24 on Microsoft Teams.