BUREAU OF RECLAMATION

Salmon Monitoring Team (SaMT) Weekly Meeting

Teams call: 6/11/24 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

- Please complete the Doodle Poll to assist with scheduling the WY 2024 wrap-up meeting.
- SaMT members will not need an ad hoc meeting if the season is offramped mid-week but will convene at the regular Tuesday time once temperatures reach the end-of-season threshold.

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.
- Sacramento River flows at Freeport are currently 15,050 cfs.
- San Joaquin River flows at Vernalis are currently 4,200 cfs.
- The Delta outflow index is currently at 10,400 cfs.
- Rio Vista flows are expected to range between 9,000 cfs to 12,000 cfs.
- QWEST flow values were +2,410 cfs on 6/10/24 and are expected to range between +2,500 cfs to -2,000 cfs.
- Questions
    - DWR asked what day the pumping was increased to target the OMRI of -5,000 cfs?
        - DWR responded that the –5,000 cfs rate began on 6/6/24.
    - NMFS inquired about the release range for the Stanislaus River.
        - Reclamation responded that the protocol is to provide the full possible range of releases. As of the morning of 6/11/24, releases were 850 cfs but will be moving to the maximum end of the range at 1,500 cfs to meet regulatory requirements.
    - NMFS asked for clarification on the controlling factor for exports in the Delta on 6/11/24 versus the week of 6/16/24.
        - Reclamation responded that the controlling factor is the OMRI of -5,000 cfs.
    - NMFS asked if Vernalis would potentially become a controlling factor over the next week.
        - Reclamation expects Vernalis to be low, which is driving the OMRI.
        - DWR added that with outflow decreasing and water quality increasing, there is a chance that export actions may be taken to support X2, but that will depend on the rate of Electrical Conductivity (EC) degrade.
        - CDFW noted the increase in water temperatures in the Delta and asked if water quality would become the controlling factor once the OMRI concludes.
        - DWR confirmed this and added that they will continue to have to meet X2 requirements. However, it is unlikely that OMRI will conclude in the upcoming week due to the smelt offramp criteria.

- 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 ≥ 2,748.28). If 50% of the threshold is exceeded (loss ≥ 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 ≥ 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 ≥ 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 ≥ 232.30). If 50% of the threshold is exceeded (loss ≥ 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 ≥ 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) 6/12/24.
- 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% Last week: 0-1%	Current: 100% Last week: 99-100%
YOY spring-run Chinook salmon	Current: 0% Last week: 1-2%	Current: 0-1% Last week: 1-3%	Current: 99-100% Last week: 95-98%
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: 0-2% Last week: 1-5%	Current: 0-8% Last week: 9-15%	Current: 90-95% Last week: 80-90%

Rationale for Distribution

- Wild winter-run Chinook Salmon
    - SaMT estimated that 100% of winter-run Chinook salmon have exited the Delta citing that temperatures have reached the 22.2°C threshold for multiple days. Temperatures, coupled with not seeing any in the real-time monitoring sites for multiple weeks likely means that they have exited past Chipps Island.
- Wild spring-run Chinook Salmon
    - An unclipped spring-run Chinook salmon was observed in salvage on 6/3/24, leading SaMT members to believe there is still a possibility of spring-run presence in the Delta. However, a SaMT member suggested this fish could fall in the yearling category, but another dismissed this possibility and pointed out that it was about 2 mm away from qualifying as winter-run-sized and was measured as a length-at-date (LAD) young-of-year spring-run according to the Delta Model. Ultimately, the estimation of fish in the Delta was decreased to 0-1%. The estimation of spring-run that have exited past Chipps Island was increased to 99-100%.

- Hatchery winter-run Chinook Salmon
    - CalFishTrack has not revealed any detections of hatchery winter-run Chinook salmon during the previous several weeks. SaMT estimates that all have exited the Delta at this point in the season.
- Natural-origin Steelhead
    - SaMT estimated an additional 5-10% have migrated past Chipps Island for a total of 90-95% for fish that have exited the Delta. The percentage of steelhead yet to enter the Delta was decreased to 0-2%, and to 0-8% for steelhead in the Delta.

Agenda Item 4. Open Discussion on Species Status

Salvage Update for 6/3 – 6/9/24

- Salvage and loss totals are detailed in the salvage update shared via email. Please refer to the email for specific figures.
- A few unclipped spring-run-sized Chinook salmon were observed in salvage.
- Several unclipped fall-run-sized Chinook salmon were observed in salvage.
- No hatchery Chinook salmon were detected.
- A few clipped and unclipped steelhead were observed in salvage.
- One steelhead was accidentally euthanized.
- Questions
    - CDFW asked for the date of the LAD spring-run Chinook salmon observed in salvage.
        - CDFW responded that it was on 6/3/24 and happened to be about 200 mm.

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 6/12/24. 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 6/11/24 with comments due COB Thursday (6/13/24). A final version will be distributed Friday (6/14/24). Past ITP Risk Assessments can be found at CDFW's Water Project Operations webpage.

Agenda Item 6. Additional Considerations/Other Topics

Discussion on End of OMRI Management, COA 8.8

- NMFS shared that OMR management season for steelhead will be offramped by 6/15/24 or a few days prior if water temperatures meet the offramp threshold. DWR asked if a temperature threshold is included for Clifton Court Forebay.
    - Reclamation clarified that the Clifton Court Forebay temperature offramp is only for Delta Smelt.
- NMFS asked: After 6/15/24, what OMRI limit will be in effect for smelt?
    - Reclamation responded that the OMRI would be -5,000 cfs.
- CDFW clarified that the ITP Risk Assessment does not include temperature offramps for steelhead due to the SWP ITP not covering take for steelhead since they are not a state listed fish.
    - Reclamation shared that steelhead and salmon will most likely offramp at the same time since there are only 3 more days needed of exceeding 22.2°C for OMR management season for Chinook salmon offramps and only 3 more days until 6/15/24 when OMR management season for steelhead officially offramps.
- CDFW mentioned that under the IOP, OMRI management for winter-run Chinook salmon off ramps when temperatures at Mossdale and Prisoners Point exceed 22.2 ° C for 7 non-consecutive days **and** greater than 95% of winter-run **and** spring-run have exited the Delta past Chipps Island.

Agenda Item 7. Items to Raise to WOMT

- N/A

Agenda Item 8. Next Meeting

- The next SaMT Meeting is scheduled for Tuesday, 6/18/24 on Microsoft Teams.