

Sacramento River Temperature Task Group (SRTTG) Meeting

Thursday, February 28, 2019 | 1:00 pm – 3:00 pm

Meeting Summary

Participants

Matt Brown, USFWS
Charlie Chamberlin, USFWS
Miles Daniels, NMFS
Eric Danner, NMFS
Kristal Davis Fadke, CDFW
Randi Field, Reclamation
John Hannon, Reclamation
Mike Hendrick, Reclamation
Liz Kiteck, Reclamation
Kenneth Kundargi, CDFW
Chris Laskodi, Yurok Tribe

Duane Linander, CDFW
Erica Meyers, CDFW
Mike Prowatzke, WAPA
Ryan Revnak, CDFW
Diane Riddle, SWRCB
Jeff Rieker, Reclamation
Jim Smith, USFWS
Craig Williams, SWRCB
Mike Wright, Reclamation
Garwin Yip, NMFS

Key Discussion Topics with Summary of Outcomes and Agreements

Meeting Purpose and Overview

Members of the Sacramento River Temperature Task Group (SRTTG) are provided status updates on Sacramento River seasonal temperature targets and anticipated performance. This meeting served as the ‘kick-off’ meeting for the season. Per request of the SRTTG members, this year’s meetings are being initiated earlier in the season to allow more discussion regarding the process of developing the Temperature Management Plan. This is being developed as part of State Water Board Order 90-5 and the NMFS Biological Opinion Reasonable and Prudent Alternative (RPA) actions.

Fishery Updates

Ryan Revnak (CDFW) provided an update of current activities. CDFW is currently not surveying due to high river flows. Late fall-run Chinook salmon spawning have been surveyed and carcass collection numbers are increased compared to averages, however, additional surveys are needed prior to completing a seasonal population estimate. CDFW anticipates fish stranding surveys to begin once the river flood flows subside.

Garwin Yip (NMFS) provided an estimate of juvenile winter-run Chinook salmon entering the Delta for brood year 2018; the egg to fry survival is 26.3 percent. This survival rate is better than the 25 percent long-term average.

Jim Smith (USFWS) provided an update on the Red Bluff Diversion Dam (RBDD) Rotary Screw Trap monitoring program. As of February 25, 2019, 1,149,402 juvenile winter-run Chinook salmon have passed RBDD, the greatest number recorded since 2013. It is estimated that 98 percent of winter-run have already passed RBDD in their downstream migration.

Hydrology and Operations Update

See Meeting Agenda and Handouts for reference materials.

Randi Field (Reclamation) reviewed system operations, temperatures, trends, Lake Shasta isothermal baths, Lake Shasta cold water pool volume, and the Shasta Temperature Control Device (TCD) configuration.

It is important to note the hydrologic and temperature data presented in the “Operations Outlooks” and the “Temperature Modeling Results” are no longer representative of the ‘real-time’ situation. These figures were put together based on data prior to the recent storm events which have substantially altered the current conditions.

As of February 28, 2019, storage in Shasta was at 3,867 (thousands of acre-feet). This is currently 122 percent of 15 year average. Accumulated precipitation as of February 28, 2019 at Shasta Dam is just over 56 inches, or 130 percent of average. These figures are likely to increase over the next week with additional anticipated storm events. The Northern Sierra –Eight Station precipitation index is at 47.7 inches. That is above historical average and likely to climb during the next week. The snow water equivalent of northern California is at 152 percent of average for this date.

Summary of Upper Sacramento River Summary Conditions – February (On-going):

- Shorter term forecasts (8-14 day) suggest increased chances of precipitation
- Longer term forecasts (one-month outlook) suggest equal chances of above or below precipitation
- Current Lake Shasta encroachment into the flood space: 34 percent or 350,000 acre feet encroachment. (Reclamation suggests monitoring the US Army Corps of Engineer website for daily information, because the parameter is very dynamic.)
- Current release from Keswick Dam: 25,000 cfs to manage Keswick side-flow and Shasta flood space management

Temperature Management

See Meeting Agenda and Handouts for reference materials.

Temperature Management:

- Active management has concluded for the season. Seasonal cooling is controlling water temperatures.
- Releases are made from Upper and Middle TCD Gates to rebuild cold water pool reserves

February 2019 has been a relatively cool month. Below normal temperatures are expected based on short-term weather forecasts.

Reiterating the note above, the temperature and hydrology summary data presented has little value due to significant changes in meteorology and hydrology. Reclamation anticipates updating Operations Outlooks and Temperature Model Results in March following the next issue of the California Department of Water Resources’ Bulletin 120.

Chris Laskodi, (Yurok Tribe) was interested if the Carr and Spring Creek Power Plant volumes in the February Operations Outlook would change in the future. Reclamation expects significant updates with the March Operational Outlooks as result of improved hydrology including the Carr and Spring Creek Power plant operations.

Matt Brown (USFWS) requested an update of the facilities at Trinity which has one power unit currently under repair due to activities during the Carr Fire. Reclamation expects this unit to be repaired and working in the spring of 2019. In addition, Reclamation was notified of mechanical issues earlier in the day that resulted in the temporary shut-down of Spring Creek Power Plant. Staff are currently working on the facility and expect a return to operations in the short-term. This unexpected outage increases the volume of spill at Whiskeytown Dam.

Reclamation also provided updates to current flood management activities. Reclamation is anticipating increases in releases to manage the encroached water in the flood control space at Shasta Dam. Over the weekend, flows released from Keswick Dam are expected to be between 30,000 – 40,000 cfs. Reclamation is also preparing for the next storm and planning for changes in releases accordingly. The next storm event may have significant inflows into Shasta Lake.

Flood waters from Whiskeytown Dam are currently spilling through the morning glory spillway. Today, Reclamation is estimating a release of between 3,700 cfs and 3,800 cfs from Whiskeytown Dam and expects the spill to continue over the weekend with decreasing flow rates.

Per RPA Action I.2.3, Reclamation has provided an initial 2019 seasonal temperature performance estimate to NMFS. Reclamation demonstrated that a water temperature target of 56 degrees Fahrenheit at Balls Ferry can be met, however, there is uncertainty in the fall (September and October) based on past modeling experience. As a result of cooler weather and improved hydrologic conditions, Reclamation expects improved temperature management performance with the March update.

Next Meeting

The next SRTTG meeting is scheduled for 1:00 pm., March 28, 2019 at the Joint Operations Center.