

Sacramento River Temperature Task Group (SRTTG) Meeting

Thursday, April 25, 2019 | 1:00 pm – 3:00 pm

Meeting Summary

Participants

Craig Anderson, USFWS
Eric Danner, NMFS
Miles Daniels, NMFS
Vadim Demchuk, SWRCB
Randi Field, Reclamation
Mike Harris, CDFW
Sheena Holley, CDFW
Liz Kiteck, Reclamation
Kenneth Kundargi, CDFW
Chris Laskodi, Yurok Tribe
Duane Linander, CDFW

Michael Masson, SWRCB
Erica Meyers, CDFW
Mike Prowatzke, WAPA
Ryan Revnak, CDFW
Dianne Riddle, SWRCB
Jeff Rieker, Reclamation
Alessia Siclari Melchor, SWRCB
Jim Smith, USFWS
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. In addition, the Sacramento River Temperature Management Plan is developed and monitored as part of State Water Board Order 90-5 and the NMFS Biological Opinion Reasonable and Prudent Alternative (RPA) actions.

Fishery Updates

Ryan Revnak from CDFW provided an update of current activities. CDFW has plans to begin fish surveys soon. The first aerial surveys will start on May 1st. CDFW collected one spawned out female Chinook salmon and have sent tissue samples out for genetic testing. Results next week should determine if it was a late fall run or winter run salmon.

Jim Smith from USFWS provided an update of the Livingston Stone Fish Hatchery activities. Fish collection has been delayed due to high flows. However, recent lower flows have allowed for fish collection: four female and sixteen male winter run chinook were trapped this week. The hatchery is behind on overall collection goals for males, so this week's winter run collection was helpful. Winter run totals so far are: thirty-nine females and twenty-two males. Preliminary information this morning suggested approximately sixty fish entering the trap. Genetic testing is expected for these fish and the collection numbers are more optimistic to reach goals.

Draft Temperature Management Plan Development

Jeff Rieker from Reclamation provided an overview of Reclamation's progress on developing the 2019 Sacramento River Temperature Management Plan. Reclamation solicited feedback and

comments during the previous SRTTG meeting, specifically any alternative plans to what was presented. Reclamation had received no feedback to date. The draft plan is similar to last year and includes the formal temperature compliance at Balls Ferry of 56°F and the pilot temperature compliance of 53.5°F at the Sacramento River above Clear Creek (CCR) location. Reclamation will also share this draft at a stakeholder meeting, May 6th (from 1pm to 3pm in Reclamation's Regional Office on Cottage Way in the conference room near the cafeteria) and comments will be solicited from all parties. Reclamation anticipates to submit a final plan by May 15th.

Members confirmed no spring Sacramento River pulse this year during a wet hydrologic category year; high flows are typically achieved without augmentation.

Hydrology and Operations Update

See Meeting Agenda and Handouts for reference materials.

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

Precipitation and snowpack are still measured at above average metrics in the Sacramento River basin as well as most all of California. Shasta Lake still is encroached into the flood control space by 22% as of midnight yesterday, but is expected to emerge out of encroachment of the flood control space in the next few days.

The 90% and 50% percent runoff exceedance volume differences are narrowing and both the Operational Outlook are more representative of current conditions. Hydrology and operations will again be updated in mid-May. The short term precipitation outlook suggests increased chances of rainfall.

Reclamation is currently reducing flows to afford “in-river” activities to Anderson Cottonwood Irrigation District (to install flash boards at their diversion facility). It was also reported that other coordinated activities (habitat and gravel injection, and repair work) were underway. Keswick releases are expected to return to between 8,000 cfs and 13,000 cfs following the reduced flow period to accommodate increasing agricultural water diversions.

Temperature Management

See Meeting Agenda and Handouts for reference materials.

Active temperature management has concluded for the season. Releases from Shasta Lake continue to be made from Upper Temperature Control Device (TCD) gates to rebuild cold water pool reserves. In-river temperatures have been relatively cool until recently as Keswick releases have been reduced temporarily and coincident with a warming trend and record high temperature in Redding. Balls Ferry exceeded the 56°F daily average yesterday and is expected to exceed today as well. A cooling trend is anticipated, based on National Weather Service predictions in the following days. Randi stated that Reclamation would consider opening a middle TCD gate to cool downstream temperatures if the warming continued. A return to higher Keswick releases (May 4th) is also expected to reduce the possibility of exceeding the temperature targets.

The most recent Shasta Lake temperature profiles suggest the cold water pool volumes are still above average for similar historic time periods. Conditions appear to be plentiful for future temperature management.

Preliminary modeling shows promising results. As was the case last month, April and May consistently indicate warming in the farther reaches. It is suspected that modeled warming side flow “events” warm

water below Keswick which can't be controlled early in the season. Balls Ferry is the upstream temperature control point in the RPA, although 53.5°F at CCR is proposed under future temperature control operations. This addresses spatially where the majority of the redds (spawning and rearing) have been located historically. Also similar to last month's information, another indicator of cold-water-pool volume and temperature management performance is TCD side gate timing; it is not expected until late September/early October.

Additional Items

- Contact Randi Field if you are interested in attending the Sacramento River Temperature Management Stakeholder meeting on May 6th from 1pm – 3pm at the Mid Pacific Regional Office on Cottage Way in the conference room near the cafeteria.
- Jeff Rieker clarified Reclamation's operations: North of Delta CVP allocations are at 100%, South of Delta CVP agricultural allocations are at 65% and municipal and industrial allocations are at 95%. For present conditions, the South of Delta allocation is independent from this year's Sacramento River temperature management.
- Reclamation expects Keswick releases in May to be dynamic as a result of delayed agricultural activities (due to wet conditions).
- Reclamation's Operations Outlooks include a full representation of the Fall X2 action.
- Jim Smith commented that although temperatures are warmer at Balls Ferry (due to low releases and coincident warming), current carcass collection/low numbers of potential spawning, may suggest a low risk to winter run salmon. No additional comments were offered and Reclamation reiterated options to consider opening a middle TCD gate in the future.

Next Meeting

The next SRTTG meeting is scheduled for 1:00 pm., May 23, 2019, location to be determined.