Sacramento River Temperature Task Group (SRTTG) Meeting

Thursday, October 24, 2019 | 1:00 pm - 3:00 pm

Meeting Summary

Participants

Craig Anderson, FWS
Charlie Chamberlin, FWS
Miles Daniels, NMFS
Vadim, Demchuk, SWRCB
Jim Earley, FWS
Randi Field, Reclamation
Mike Harris, CDFW
Josh Israel, Reclamation
George Kautsky, Hoopa Valley Tribe

Liz Kiteck, Reclamation Ken Kundargi, CDFW Chris Laskodi, Yurok Tribe Duane Linander, CDFW Michael Macon, SWRCB Ryan Revnak, CDFW Johnathan Williams, CDFW Mike Wright, Reclamation Garwin Yip, NMFS Stephen Maurano, NMFS

Key Discussion Topics with Summary of Outcomes and Agreements

Meeting Purpose and Overview

Members of the Sacramento River Temperature Task Group (SRTTG) 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 a survey update. CDFW crews are monitoring shallow fall run redds during the current flow pulsing. As of two days ago, 100 shallow fall run redds had been marked. Ryan described it was difficult to tell exactly how many fall run redds chose not to spawn at 8,500 cfs rather than at 6,500 cfs, however he suspects lower flows are keeping fish out of areas where redds might be dewatered. Carcass survey collection suggests the peak of fall run spawning is occurring now. Monitoring is limited to boat-based surveys as high winds are preventing aerial surveys. Prior monitoring suggests winter run stranding is not substantially more likely to occur at Keswick releases cycling from 8,500 cfs to 6,500 cfs. Ryan reported a couple of sites were inundated and disconnected and have planned to remove fish if necessary as flows drop. Based on observations, not many juvenile fish have been stranded. There were no updates from the Livingston Stone National Fish Hatchery. Jim Earley from FWS reported an increase in the juvenile counts at the Redd Bluff rotary screw traps in response to the pulsing flows from Keswick. Garwin Yip from NMFS reported, as of 10/21, estimated passage at Red Bluff of 3.2 million winter run chinook salmon for the year to date and close to 800,000 in the last two weeks.

Restoration Update

Jim Earley provided a brief update on restoration of the Rio Vista side channel (1/3 mile long) near Red Bluff and the Reading Island Restoration (2 miles long) projects. Both projects are making

progress and construction continues as planned. There were initial concerns projects may be impacted by the pulsing flows from Keswick, however they have been accommodated.

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.

Reclamation is hosting meetings with the fishery agencies to coordinate fall Keswick flow reductions. These meetings address balancing competing water Sacramento River demands in the system during the months of September through November. Per discussions with the coordination team, Keswick releases are currently pulsing with the desired outcome of fluctuating the river during a flow increase (to meet downstream demands) to discourage fall run spawning at the higher release. Garwin Yip expressed appreciation to Sacramento River Settlement Contractors and Reclamation for their flexibility addressing fall run spawning concerns. Garwin also requested a modification to the flow pulses, based on prior discussion with the fishery agencies. Although the peak flow release was estimated conservatively at two days, recent monitoring identified 27 fall run were spawning during this period and agencies suggest shortening the peak duration (one day) and decreasing the magnitude if possible (8,000 cfs). Members discussed it appeared the magnitude of agricultural diversions were not much as projected resulting in higher than anticipated Wilkins Slough flow and stage. Reclamation will solicit feedback from downstream users on requested flow modifications and adaptively adjust flows. Rice decomposition diversions are expected to peak in the last days of October. Randi mentioned additional releases were also incidentally helping USFWS RPA Action 4 Fall X2 requirements at 74 km in conjunction with delta operations. Randi conveyed concerns for future dry conditions and highlighted the differences between the 90% and 50% hydrologic runoff exceedance outlooks. Reclamation evaluated the operational scenarios and decided on a conservative approach; the release at Keswick will ramp down to 5,000 cfs at the end of the pulsing period for water supply conservation and target the sustained release through January for fall run protection.

Temperature Management

See Meeting Agenda and Handouts for reference materials.

Operations are in active temperature management utilizing Temperature Control Device (TCD) all Pressure Relief Gates (PRG). Side Gate use is not anticipated, however there would be a possibility if unusually warm conditions persisting into November.

As reported in the last several months, the most recent Shasta Lake temperature profiles suggest the cold-water-pool volumes continue to be well above average for similar historic time periods. Conditions still appear to be plentiful for future temperature management.

No modeling was performed this month, the end of the official temperature management season concludes on October 31. Regardless, Reclamation will continue manage temperatures until ambient conditions are amenable to change the TCD configuration to a selective withdrawal from a higher elevation and begin conserving cold water pool for next year's temperature management season.

Additional Items

- George Kautsky from the Hoopa Valley Tribe was interested in the release of the New Biological Opinions earlier this week and specifically any changes to Trinity Lake and Trinity diversions. Garwin reviewed the four-tier approach for Shasta cold water pool, habitat, and flows protection on the Sacramento River. The revisions address the more extreme conditions recently experienced during the drought period highlighting also a more proactive approach to target the redds/location and specifically oxygen demands when resources are limited.
- Jim Earley noted that discussions for potential spring pulse flows on the Sacramento River next year are expected in the short term. Early coordination will address design and logistical issues.
- SRTTG members did not oppose the annual winter hiatus; SRTTG in-person meeting will be suspended for the non-temperature management months. Reclamation will send electronic updates at the end of the month November though January. If members feel it necessary to meet due to unexpected conditions, please contact Randi Field to schedule a meeting.

Next Update

The next SRTTG update will be distributed at the end of November.