



Sacramento River Temperature Task Group Notes

February 23, 2023

Members Attending

- USBR: Elizabeth Kiteck, John Hannon, Levi Johnson, Emilia Barnum, Emily Van Seeters, Tom Patton
- USFWS: Charles Chamberlain, Bill Poytress, Craig Fleming, Kaitlin Dunham, Matt Brown
- CDFW: Crystal Rigby, Erica Meyers
- NMFS: Cyril Michel, Eric Danner, Garwin Yip, Miles Daniels, James Gilbert
- DWR: Mike Ford
- SWRCB: Claudia Bucheli, Diane Riddle, Jeff Laird, Kevin Reece, Matt Holland, Michael Macon
- SRSC: Lee Bergfeld, Mike Deas
- WAPA: Michael Prowatzke
- Yurok Tribe: Christopher Laskodi
- Hoopa Tribe: Veronica Yates

Topics/Actions

- Agency Leads: Send the names of two designated agency representatives for the Shasta Planning Group breakout discussion to Mia Schiappi, K&W. The designated representatives can be changed as needed depending on the topic of discussion.
- Kearns & West (Facilitation Team): Share the SRTTG-SPG relationship presentation.

Welcome, Agenda Review, and Purpose

Adam Fullerton, Kearns and West welcomed all participants and facilitated agency introductions.

Agency Introductions

SRTTG agency representatives introduced themselves and their team as well as stating their roles with respect to SRTTG (e.g., primary representative for their agency, provision of specific geographic expertise)

Purpose and Objective

The purpose of the SRTTG is to “share operational information monthly and improve technical dialogue on the implementation of the temperature management plan.” Reclamation provides “a draft temperature management plan to the SRTTG in April for its review and comment, consistent with WRO 90-5.”

House Keeping

- K&W reported that the end of the year interviews conducted with SRTTG agency representatives resulted in several recommendations that will be implemented going forward. The comments and recommendations included:
 - Improved clarity on how the Shasta Planning Group (SPG) and SRTTG will be interacting moving forward.
 - More information about how and when modeling will be done.
 - Simplified editing of meeting summaries through use of SharePoint. SRTTG members will now provide edits on Draft documents via SharePoint. The SharePoint site will be used for draft summaries only. The final document will be posted on Reclamation’s website.
- The first Spring Pulse Flows Meeting will take place on March 3 at 10:15-11:00 am. Contact Mia Schiappi, K&W, if you would like to participate. Regular updates from these meetings will be shared with the SRTTG.
- There is a Shasta site visit scheduled for March 9th as part of the SRSP annual workshop. Please contact K&W if you have not received an invitation and would like one.

Litigation Update

- Tom Patton, Reclamation, shared that there are currently no litigation updates. Reclamation is waiting for the judge's decision on the IOP for this year. An email update will be shared with the group once an update is provided.
- Matt Brown asked how the SRTTG will be affected by the outcome of litigation. Would it change the processes for SRTTG and SPG? If so, what would those changed look like?
 - Reclamation shared that it would likely not affect the SPG this season. The IOP will guide operations this season and be informed by the modeling and tech discussions at SRTTG.

Initial Temperature Modeling

The modeling entities provided updates on their plans for modeling this season.

- Sacramento River Settlement Contractors (SRSC) Modeling:
 - Mike Deas, SRSC, shared that modeling is currently being prepared for the season. The current modeling started on Feb 4th. They will start in earnest when they receive a forecast from Reclamation and DWR.
 - K&W asked if modeling will be shared regularly with SRTTG or intermittently.
 - Mike explained that if there is information to be shared then it will be presented to SRTTG. If there is no relevant information to present, then there will be no update provided. Last year, there was more urgency to perform exploratory runs.

- NMFS Science Center:
 - Miles Daniels echoed Mike’s comments; they will share any modeling or results as it becomes available like last year. No hard modeling has been done at this point.
- Reclamation modeling this season:
 - Tom Patton shared that February’s forecast is incomplete, and he will distribute the final product once completed (likely next week)
 - Model runs will begin with the HEC5 program in late March. March hydrology will be shared in late March. Seasonal operation is currently uncertain. A forecast will be given monthly starting in March going forward.

Update from Shasta Planning Group and SRTTG Coordination

- K&W presented a PowerPoint on SRTTG and SPG. The presentation described the member roles and processes for SRTTG and SPG for the 2023 Spring season.
 - SRTTG- A group that provides technical input to USBR on its Sacramento River temperature management plan; input focuses on Shasta Reservoir gate operations and sometimes flow releases (I.e., flow adjustments within a feasible range that also allows USBR to meet their other requirements). The group has no decision-making authority.
 - SPG- While the Interim Operations Plan (IOP) is in effect, the SPG serves as a policy-level group, which seeks consensus on project operations related to temperature management. When SRTTG has technical disagreements or identifies policy issues, they elevate the topic to the SPG.
 - The SPG will discuss any changes to Reclamation’s requirements, including senior water rights deliveries and Delta requirements, to support decreased releases. They may seek feedback from SRTTG on specific scenarios if appropriate and necessary.
- Updates to this season's SRTTG and SPG procedures are the following:
 - KW will add a final agenda item in which the SRTTG can identify any topics for elevation from the SRTTG to the SPG. The process will be as follows:
 - Step 1: The full SRTTG will identify issues that need to be raised to the SPG.
 - Step 2: State and Federal Agencies with members on the SPG will meet in a breakout caucus to discuss the framing of the issues and any recommendations.
 - Step 3: Communication:
 - Once the caucus representatives have met, they will agree to the characterization of the issue(s) and recommendation(s) and will share their recommendation to the SPG via email or pass it on to K&W for email distribution.
 - The recommendations from the SPG will be added to the agenda for discussion during the next SRTTG meeting.

- NMFS asked if the process has been run by the SPG already or provided feedback. If so, how did that go?
 - K&W shared that discussions have been held with SPG. The SPG provided input and recommendations on how to create and implement this process. It is uncertain whether the SPG has met yet this season. K&W will make sure that SRTTG is in close communication with SPG.
- NMFS asked if the agency representatives will have enough time to discuss topics to reach an outcome in the caucus and report back to the broader group within the allotted meeting time.
 - K&W replied that the report back will be held at the end of the meeting. It's likely that the report back will be distributed by email in many cases. As a facilitation team, K&W will try to proactively plan for time for robust conversation in the caucus within the allotted meeting time.
- NMFS asked about the relationship between the subdirectors and SPG, since both were mentioned in the presentation.
 - SPG members were being characterized as subdirectors, but KW realizes the membership may not be entirely consistent across agencies. The connection we were trying to make is that the caucus is for the members who have staff and supervisors who sit on the SPG. The SPG voiced interest in hearing from their staff members. Each agency should identify which two staff could be involved in the breakout groups, to make meetings more focused and efficient. Email Mia with the two members from the agencies for those who should be involved in the caucus.
- USFWS asked if they could have experts participating depending on the caucus subject matter discussed.
 - K&W said that each agency can specify which staff members they would want to attend based on the subject matter, though some consistency is appreciated for ease of planning the breakout session.

Hydrology, Operations, Forecasts, and Temperature Management

Reclamation presented the hydrology, operations, and temperature management updates.

- Tom Patton, CVO, shared that this year started well with the January precipitation. It has been a cold year so far, which is good for cold water volumes, but the reservoir has not accumulated a lot of volume yet. Snowpack is slow-moving in the northern part of the state. Hopefully, we can get some additional accumulation in snowpack that will help in the long run for temperature management.
 - Precipitation is currently at 39.2 inches to date. 115% for this time of year.
- Snow Plots:
 - Top northern basins at 114% of the snow water content for this time of year; would like the northern basins to tick up a bit.
 - Central Sierra is at 142% Southern Sierra 170%

- Snowpack will provide decent run off from Northern San Joaquin to the Southern Delta.
- Daily CVP Water Supply:
 - Storages:
 - Trinity is at 56% of the 15-year average. Better run off this year than last year.
 - Shasta: Looking good but still need more. 93% of the 15-year average;
 - Folsom: 109% of average.
 - Accumulated Inflow: Close to 100% of 15-year average for Trinity Reservoir and Shasta; a little better at Folsom and improves as one works down the system to New Melones.
- Releases:
 - Shasta generation is releasing based on the 3,250 cfs at Keswick. No plans to make any changes. They had to increase Keswick a little bit when there was more precipitation in January; there were also some side flows that came into Keswick and Lewiston as well. Both reservoirs released the excess flows but are now back down to normal minimum flows.
 - In terms of operations, there are no plans to make any diversions from the Trinity side; there are some Winter Variability flows. Trying to rebuild storage by minimize diversions.
 - The TCD is on all middle gates. As the lake fills, we will move to the upper gates but will require some more inflow for that to happen. 48 ° F is coming out of the TCD.
- Sac River Mean Daily Temperatures: The Sac gauge is still the control point.¹ We will develop the TMP based on hydrology and reservoir conditions. For now, the forecast is a carryover from last year until things change this year.
 - Trinity River: Working on the Trinity unit to bring back the Trinity Powerhouse Unit. Currently, testing flows and releasees, so may see some flows from Trinity system but will be very minimal diversions through Carr Powerplant. May install some flow meters within the next month in the Trinity Reservoir that will provide data in real time.
- Shasta Profile:
 - Cold 48 ° F at surface, 44 ° F at the bottom of the reservoir.
 - The temperature looks good this year.
- Trinity Profile:
 - 43.8 ° F on surface, 42.7 ° F at the bottom of the reservoir.
 - The plot is based on an older profile. Check the website to see that comparison in the next couple of days.
- Whiskeytown Profile:

¹ Noted after the meeting by NMFS: The control gauge at the time of the meeting was “yet to be determined.” Five days after the 2/23 SRTTG meeting, the IOP was issued and specified the Clear Creek Gauge as the control.

- Whiskeytown Reservoir is cold as well, which is consistent with the other two reservoirs.
- Plots and exceedance look typical for this time of year.
- Estimated CVP Operations: Due to the precipitation in January, operations for salinity were initiated in the Delta in February at Row Island.
- A TUCP was submitted to the Water Board and
- They accepted the change condition.
- Federal and State agencies will be operating on Chipps Island.
- Based on the 90% of runoff forecast in reservoir, on track for the month of February to meet the forecast for Shasta inflow.
- Estimated releases for rivers:
 - USFWS asked if the Trinity Cold Water Volume is low, and as a result, if water will not be brought to Clear Creek. What can be done to Clear Creek to provide water?
 - Tom shared that a similar approach will be taken as last year. There will be an impact on Clear Creek at Whiskeytown and the Sacramento River. Reevaluations will be conducted once the area receives more precipitation, but there is a prediction of minimal precipitation, so it does not look promising in terms of diverting water for temp management at Clear Creek and Sacramento River. Basins are going to have a limited supply of water. Snowpack will help, but it is lacking volume in the northern projects.
 - Official 30-Day Weather Forecast:
 - February is expected to be colder than average. May get more precipitation in the latter half of the month.
 - Season Temperature Outlook- looking at March/April/May time frame.
 - Predicting that there are equal chances for being above or below average temperatures.
 - Seasonal Precipitation Outlook-
 - Equal chances of being above or below average precipitation.

Coordinating Operations Agreement:

- At the end of January 2023, COA balance was 18 TAF in CVP favor. This does not include the adjustments for New Melones Reservoir 2021 and SRSC 2022 actions.

River Fish Monitoring: 1) carcass surveys 2) Redd counts 3) stranding and dewatering surveys

- CDFW did not provide any River Fish Monitoring updates.

Fish Distribution/Forecasts: 1) Estimated percentage of the population upstream of Red Bluff Diversion Dam for steelhead, winter-run, and spring-run Chinook salmon 2)

Sampling at rotary screw traps at Red Bluff Diversion Dam 3) Steelhead update 4) Livingston Stone Hatchery

- USFWS reported from 2/11 onwards we are seeing primarily juvenile Fall Run. Numbers in daily catch are fairly low for this time of year. 57% of run has passed based on historical average. The actual numbers of naturally produced fall run are much lower than what is reported on the bi-weekly reports because there have been 3 releases of unmarked fry from the Coleman National Fish Hatchery into the Sacramento River totaling 2.75 million fall Chinook. These fish cannot be distinguished from naturally produced since they are unmarked. Intercepting quite a few unmarked fry which will be added to the passage estimates for unmarked fall Chinook this year.
- Catching Spring and Winter Run fish, though most fish have passed: Winter Run at 98% and Spring Run at 57% passage.
 - Numbers are low throughout all the runs.

Livingston Stone Hatchery Update:

- Kaitlin Dunham, USFWS, shared that the Livingston Stone Hatchery will be releasing a total of 300,000 BY 2022 winter-run Chinook on February 24, 2023 in three separate trips, one in the afternoon and two in the evening. They have started collecting adults from the Keswick trap and retaining them for two weeks. Collected 14 males and females today. The Red Bluff Office is conducting acoustic tagging for their studies.
 - CDFW asked if the adults they had caught were winter-run Chinook.
 - They are genetically confirmed as winter run Chinook.
- K&W will include the biweekly report from CDFW updates to SRTTG packet.
- USFWS asked if the target for adults is the same as last year. What is the production for this year for reference?
 - USFWS added that the goal is to collect three times as many females as last year (2022) for a total of 180 females.

Additional Announcements

- Livingston Stone Hatchery plans to have chillers in place in the summer. Also looking at tapping into the 750 ft-outlet elevation to cool the water down
- Matt Brown, USFWS, shared that the Fish Trends Meeting is coming up on February 24. On March 10, there will also be the SRSP Annual Workshop focusing on the drought.

Topics for Elevation to Shasta Planning Group

- None

Adjourn