



Sacramento River Group Summary

June 25, 2026

Participants

- California Department of Fish and Wildlife (CDFW): Mike Memeo, Matt Johnson, Crystal Rigby, Gary Zhao
- California Department of Water Resources (DWR): Ryon Kurth, Mike Ford, Kevin Reece
- Contra Costa Water District: N/A
- Defenders of Wildlife: N/A
- Friends of the River: Devon Pearse
- Jacobs Engineering:
- MBK Engineers: Lee Bergfeld, Catherine Morales
- National Oceanic and Atmospheric Administration (NOAA): Miles Daniels, Drren Howe
- Pacific States Marine Fisheries Commission (PSMFC): Darren Olsen, Amy Shepard
- State Water Resources Control Board (SWRCB): Matthew Holland, Diane Riddle, Craig Williams
- Sacramento River Settlement Contractors (SRSC): Lee Bergfeld, Catherine Morales
- San Luis-Delta Mendota Water Authority: J Scott Petersen
- Save CA Salmon: Trisha Vellasquez
- Sunzi Consulting:
- U.S. Bureau of Reclamation (USBR): Tom Patton, Lisa Elliott, Alyse Lacey, Michelle Pecheco, Derek Rupert
- U.S. Fish and Wildlife Service (USFWS): Bill Poytress, Bob Null, Craig Anderson, Kaitlin Dunham

- Westlands Water District (WWD): Brad Cavallo, Alan Rosenthal
- Western Area Power Administration (WAPA): Erik Mork
- Yurok Tribe: N/A
- Kearns & West (K&W): Mia Schiappi, Marlys Jeane

Summary of Actions

Welcome, Agenda Review, and Purpose

Mia Schiappi, Kearns & West, welcomed all participants.

Hydrology Update

Tom Patton, Reclamation, provided the latest forecast and implications for the Sacramento River system, and reported on current hydrologic conditions and dam operations. Patton presented the information contained in the meeting packet shared with the SRG. Sections below correspond to groups of graphs, images, and tables in the meeting packet provided by Reclamation.

Current Storage, Releases, Water Temperatures, and Current Operations: Daily CVP Water Supply as of June 24, 2026.

- Precipitation:
 - The Northern Sierra 8-Station Index is 50.7 inches, which is 97% of the average for this time of year.
 - Snow water content is at 0% of average in the North, 4% of average in Central Sierra, and 15% of average in the South. Current snowpack statewide is 1% of the April 1 average, and 4% of the average for the date.
- Reservoir Releases:
 - Lewiston Reservoir releases to the Trinity River are currently 600 cfs and will decrease to 450 cfs on July 4 and remain through most of the summer at typical minimum flows. Storage at Trinity is healthy at over 2 MAF.
 - Whiskeytown Dam reservoir levels are high for the summer; trying to divert as much water as possible from the Trinity River through Whiskeytown to Spring Creek and Clear Creek.
 - Clear Creek pulse flow is off-ramping to 150 cfs on Thursday, June 25, will decrease to 125 cfs on Friday, June 26, and will then decrease to 100 cfs in July. Temperatures on Clear Creek will be monitored and flows managed on an ongoing basis.
 - Keswick Dam releases to the Sacramento River are 12,500 cfs and will remain steady for about a week and then increase by about 1,000 cfs in July for Delta needs.

- CVP Storage and Inflow:
 - Trinity Reservoir storage is 122% of the 15-year average.
 - Shasta Reservoir storage is 3.6 MAF, about 109% of the 15-year average.
 - Folsom Reservoir storage is 119% of the 15-year average.
 - Although the WY is Above Normal, water supply is on the edge of the Above Normal and Below Normal cutoff; could be considered the driest Above Normal WY that could be had.
 - Anticipating a 2.2 MAF projected end of year carryover storage for the 90% WY forecast.
- Temperature Management:
 - At the beginning of June, Reclamation made a change to the Temperature Control Device (TCD) configuration and closed all the upper gates. The first lower gate to open was on June 11, with a second opening on June 14. Two middle gates were closed on June 18. On June 23, Reclamation opened a third lower gate; however, due to cooler temperatures than anticipated, Reclamation closed the third lower gate on June 25. In total, two lower gates and three middle gates remain open to maximize cold water conservation.
 - Early June temperatures exceeded 53.5 °F, reaching 53.6 °F for two days. Once the air temperature cooled down, the system temperature stabilized back to the target level
 - Overall, temperatures are cooler on the Trinity system. Reclamation will continue monitoring temperatures given reduced flows in the system.

Reservoir Profiles and Cold-Water Pool: Graphs on Isothermobaths-2026, Graphs on Cold Water Pool Volume, Percent Exceedances (1998-2023):

- Shasta Reservoir:
 - Shasta's isothermobath plot is normal for this time of year, showing warmer surface temperatures nearing 80°F with cooler temperatures deeper in the reservoir.
 - The cold water pool volume for the $\leq 52^{\circ}\text{F}$ temperature profile is average for this time of year.
 - The cold water pool volume for the $\leq 50^{\circ}\text{F}$ is trending down and is below average.
 - The cold water pool volume for the $\leq 48^{\circ}\text{F}$ is lower than average, with the volume in between the levels of drought years 2022 and 2015. This is concerning so Reclamation is monitoring closely.

- Shasta volume is between the 50% and 75% exceedance marks for the cold water pool volume for the $\leq 52^{\circ}\text{F}$ temperature profile. The $\leq 50^{\circ}\text{F}$ temperature profile is at 75% exceedance, while the $\leq 48^{\circ}\text{F}$ is at about the 95% exceedance.
- Temperature profiles for Shasta reservoir are collected weekly.
- Trinity Lake:
 - Trinity Lake isothermobath plot shows a warming surface this time of year as expected, but overall there is a large cold water pool with high storage.
 - The cold water pool volume for $\leq 52^{\circ}\text{F}$ is above average.
 - The cold water pool volume for $\leq 50^{\circ}\text{F}$ is above average.
 - The cold water pool volume for $\leq 48^{\circ}\text{F}$ is above average.
 - Trinity volume is between 50% and 75% exceedance marks for the cold water pool volume for the $\leq 52^{\circ}\text{F}$ and $\leq 50^{\circ}\text{F}$ temperature profiles. The $\leq 48^{\circ}\text{F}$ temperature profile is at about 25% exceedance.
 - Temperature profiles for Trinity and Whiskeytown reservoirs are collected monthly.
- Whiskeytown Lake:
 - Whiskeytown continues to warm, with the cold water pool volume smaller than some previous years. Spring Creek Power Plant temperatures are running warm around 56°F . Reclamation will continue moving water through Whiskeytown from Trinity Reservoir to help keep temperatures lower and support the Sacramento River.
 - The cold water pool volume for $\leq 60^{\circ}\text{F}$, $\leq 58^{\circ}\text{F}$, and $\leq 56^{\circ}\text{F}$ is expected for this time of year.
 - Whiskeytown volume is at about 95% exceedance for the cold water pool volume for the $\leq 60^{\circ}\text{F}$ and $\leq 58^{\circ}\text{F}$ temperature profiles, and about 90% exceedance for the $\leq 56^{\circ}\text{F}$ temperature profile.

90% June Exceedance Forecast:

- Forecasts are taken partway through the month and then again at the end of the month. Reclamation will account for adjustments seen in the first part of the month and will build in some differences from the 50% scenario.
- Even when accounting for the differences, the end of September Shasta storage volume is predicted to be 2.2 MAF. This is a drier scenario with accretion depletions from other tributaries in the basin expected, and some additional differences for Delta needs.

- Trinity's end of September storage is forecasted to be 1.5 MAF. There is a potential need for additional Trinity flows to help with the Klamath in August and September.
- Low storage on the American will mean more coordination with Sacramento flows and American flows to meet Delta needs.
- Diversions from Trinity Reservoir through Spring Creek powerplant have increased.
- Trinity flows are increasing to 13,500 cfs in July.
- The Delta is expected to have minimal pumping through July, with flows meeting Delta requirements and downstream needs.
- Flows will decrease to 3,250 cfs in the winter and will ramp up again in the spring for Delta needs in April and May.

50% June Exceedance Forecast:

- Shasta storage is projected to be slightly over 2.2 MAF at the end of September; currently on track at 3.5 MAF projected for the end of June.
- Trinity storage is projected to be 1.6 MAF at the end of September.
- Although the 50% forecast is a wetter scenario, there is very little difference between the 50% and 90% Exceedance Forecast scenarios at this time of year because of minimal variability in forecast or runoff.
- For releases, some flood control operations are planned for Shasta in late spring 2027. Flows on the Sacramento River are forecasted to peak around 13,500 cfs for July and reach minimum flows of 3,250 cfs in the winter depending on Delta needs.

Monthly Temperature Outlook:

- The July predictions show above average changes of above average temperatures for the western states, specifically the Pacific Northwest and Northern California.

Seasonal Temperature Outlook:

- The July-September predictions show above average chances of above average temperatures for western states, specifically the Pacific Northwest and Northern California.

Questions and Discussion

- SWRCB asked about calculations of carryover storage and if they are anticipated to be higher than 2.2 MAF given that the Sacramento River Settlement Contractors are planning to use 50,000 to 80,000 cfs less water this year?
 - Reclamation responded that assumptions around user needs are baked into calculations. While releases aren't adjusted by a specific amount that the diverters are planning to fallow, operations decisions in the summertime are mainly driven by coordination with the water contractors about their

diversion estimates and adjusting for Delta needs, which requires coordination with the American River. Any potential reductions on the Sacramento River would be reflected in the releases throughout the year.

- USFWS asked about the May and June 90% exceedance forecast predictions and if Reclamation can explain why storage numbers each month remain the same?
 - Reclamation explained that there are some differences in diversions being made from the Trinity, and Reclamation does not see the need to push Trinity diversions so hard in the 50% forecast. There have been unforeseen issues before that make it hard to forecast, like negative pricing for example, so there is no desire to put a lot of reliance on the single Spring Creek unit if there is no knowing what might happen. Between the 50% and 90% forecasts, there are too many differing variables like inflows, releases, estimates of downstream accretion depletions, etc. that make it hard to compare the two forecasts like apples to apples.
 - Reclamation noted that Delta needs are hard to forecast, for example how much water it will take to meet requirements. Often outflow estimates are not enough to meet salinity requirements. Therefore, uncertainty with Delta requirements drives upstream releases.
 - Reclamation pointed out that releases ramp up in August but then decrease again in September and into the fall; pumping in the Delta is lower this year relative to past years.

Temperature Management Plan

Tom Patton, Reclamation, provided an update on the current status of the Temperature Management Plan (TMP).

- Using the latest profile, the Sacramento River temperature June 90% exceedance was forecasted for the remainder of the season, targeting 53.5°F at CCR. Shasta, Keswick, and CCR temperatures were estimated using L3MTO 25% meteorology.
- Temperatures increase in the summer, with the first side gate pull in August and a full side gate in early September. Temperatures will slowly increase to exceed 53.5°F in late September.

Questions and Discussion

- SWRCB asked about Sacramento River modeled temperature and Reclamation's confidence in projected side gate use driving accurate estimates?
 - Reclamation responded that there are blended strategies around side gate usage, and usually both side gates are opened within one week to ten days of each other. However, there are times when no side gates or only one side gate needs to be opened. Reclamation offered the possibility of doing hindcast comparisons, but they compare current results with model outputs which gives them confidence in the gate configuration modeling.

- Reclamation explained that, ultimately, fall temperature projections drive the final temperature in the Sacramento River in October and November.
- If anyone from SRG wants modeling data, they can ask Tom Patton or Michelle Pecheco.
- USFWS asked if there are updated temperature-dependent mortality estimates?
 - Reclamation did not have temperature dependent mortality estimates other than those provided in the Temperature Management Plan. Reclamation offered to look into running updated TDM modeling.
 - SWFSC offered that they would be able to provide the group with updated modeling during the next SRG meeting.
 - TDM can be found on the [SacPAS site here](#).

CDFW Sacramento River Fish Monitoring Update

Mike Memeo, CDFW, provided an update to the SRG about carcass surveys and fish monitoring. The June survey results through 6/25/26 include:

- One shallow redd (less than 2 feet water) at RM 298
- There have been 34 redds observed during redd surveys, the lowest of which was found at RM 296
- To date, have surveyed 343 total carcasses in sections 1 and 2 and are above average for this time of year (average is 205 carcasses)
- Percentage of hatchery fish is 63% of the carcasses

USFWS Fish Conditions, Forecasts and Hatchery Updates

Kaitlin Dunham, USFWS, provided an update on the Livingston Stone Hatchery.

- LSNFH has spawned 15 Battle Creek origin winter-run Chinook and 14 Keswick origin winter-run Chinook
- Meeting collection goals at Keswick Dam and will continue to collect through July
- First group of eyed eggs will start next week, 6/29

Questions and Discussion

No questions or discussion.

Temperatures Dependent Mortality (TDM) Model Assumptions

Mia Schiappi, Kearns & West, introduced a process the SRG will be undertaking related to developing a shared understanding of the TDM models over the course of the next month, which will include documenting assumptions, inputs, and outputs in the TDM models.

Objectives:

1. Shared understanding amongst SRG participants of TDM modeling
2. Document model inputs and outputs for various model runs
3. Enable comparison of variable inputs between models

Process:

- The SRG will convene modelers and technical staff to meet and discuss the inputs and outputs currently used in TDM modeling. All SRG members all welcome to attend.
- Presentation on updated table to SRG for detailed discussion
- Reorienting SRG annually on TDM models ahead of temperature management discussions

Questions and Discussion

- WWD asked if there was an opportunity to review and discuss changes that are brought to the table given there are many assumptions, uncertainties, etc. that need to be discussed and vetted by everyone?
 - K&W responded that this will be taken into consideration as the process for updating the table has not been fully designed yet.
- SRSC asked who will be in the smaller group?
 - K&W answered that it will likely be a subset of people from this larger SRG group, including those who developed the initial table and process. However, if anyone else wants to be in the discussions, they are welcome and can reach out to Mia at K&W to coordinate their involvement, all SRG members are welcome to join the meeting.

Additional Announcements

- Miles Daniels, NMFS, announced the update and pending release of a decision support tool called CVTEMP. Miles requested the SRG group review the tool as they are the target audience, interested in temperature management on the Sacramento River. NMFS is seeking feedback on the tool.
 - K&W will add this item to the July agenda. In the meantime, anyone can reach out to Miles with feedback or to discuss the tool in detail.
- SRSC asked about spawning data from CDFW and if spawning rates for this year are on par with last year's rates.
 - CDFW responded, noting that data collected every day. Monitoring data can be found at SacPas. This year, spawning data has surpassed last year at this time and is close to years like 2022 and 2023, however there is no true way of

predicting future spawning. CDFW can provide an answer as to whether spawning rates are ahead or behind last year in mid-August.

Additional Announcement & Review Action Items

The next SRG meeting is scheduled for Thursday, July 23, from 1:00-3:00 pm PT.

Adjourn