



Sacramento River Group – Spring Pulse Flow Planning Subgroup Meeting Summary

Tuesday, April 28, 2026, 1:00-2:00 p.m.

Participants

- ACID: Daniel Ruiz
- CDFW: Tracy Grimes, Sheena Holley, Crystal Rigby
- DWR: Mike Ford, Ryon Kurth, Kevin Reece
- FOR: Devon Pearse
- NMFS: Kyra Fitz
- NorCal Guides: James Stone
- SWFSC: Miles Daniels, Cyril Michel
- SWRCB: Jeff Laird
- SRSC: Thaddeus Bettner, Mike Deas, Yuen Lenh, Anne Williams
- USBR: David Ayers, Elissa Buttermore, Randi Field, Andrea Hamilton, Mandy Migura, Mechele Pacheco, Tom Patton
- USFWS: Bill Poytress
- WAPA: Eric Mork
- Kearns & West: Terra Alpaugh, Chelsea Cullen

Action Items

Reclamation

- Prepare temperature management plan for review at the April 30th SRG meeting.

Key Discussion Topics

Agenda Review

Kearns & West (K&W) reviewed the agenda and acknowledged Matt Brown and Elissa Buttermore, who are leaving their federal roles, for their contributions to SRG.

Potential Pulse 2 Scenario Development

Reclamation shared an update, which was also shared with agencies at the April 27 SHOT meeting:

- Reclamation is no longer considering any additional pulse flows this year based on a few factors:
 - The latest forecast shows a smaller than average cold-water pool at Shasta, low end of season carryover storage, and an early final side gate pull (which signals the loss of downriver temperature management control).
 - There are uncertainties with the temperature modeling, such that while the modeling does not show a significant impact of an additional pulse flow on temperature outcomes, Reclamation has decided to be conservative on the water usage.
- The Thursday April 30 SRG meeting will be focused on reviewing the draft temperature management plan and results.

Questions, priorities, and lessons learned for consideration in future years

Participants offered thoughts on what the SRG could consider to support pulse flow planning in future years.

- NMFS acknowledged that spring pulse flows are intended to benefit multiple species and observed that the early April pulse likely most benefited fall run hatchery fish; they emphasized that designing pulse flows to benefit ESA-listed spring run is a priority for NMFS.
- USFWS asked for a definitive answer from LTO managers regarding whether pulse flows can be considered in March in the future; if so, this SRG planning group could convene in February.
- USFWS flagged the need for more data on the real time and historic timing of tributary passage on Mill and Deer Creek to inform pulse flow scheduling.
- SWFSC recommended that Reclamation allocate an acceptable water cost for pulse flows earlier in the season, so the group can craft the best pulse scenario given the available water (e.g., use all the water on one pulse or split the water between pulses to benefit difference species). For instance, if the SRG had known that only 50 TAF was available, they might have decided to use it differently (e.g., for a spring run-focused pulse)

- Reclamation stressed that it can be very hard to understand water and cold-water pool availability that early in the season. In late March, it was not clear what the impact of the dry, warm March would be on subsequent forecasts. The temperature management plan could potentially consider analysis of uncertainty earlier in the season.
- NorCal Guides suggested that determining a minimum acre-foot pulse flow water allocation as a baseline might be more feasible; decision trees could be established to guide the water volume's distribution among runs depending on the amount. He emphasized the importance of planning to provide multi-species benefits, stating that the focus on protecting listed species is a disservice to the fall run's juvenile stage. Pulse flows should focus on preventing another ESA listing of the fall run.
 - SWRCB supported the idea of a minimum allocation.
- Reclamation emphasized that this year's extremely warm March was unusual; in early April, they thought temperatures would soon be unsuitable in the Delta and getting any fish ready to migrate out of the Sacramento moving immediately was a priority. They asked what tools could be used to better anticipate this situation in the future.
 - SRSC and NorCal Guides proposed creating a loading order to ensure the group's highest priorities are being met first; this could guide a decision tree for allocating appropriate percentages of the available water.
- Friends of the River commented that the 35,000 cfs pulse flow is so minimal that it's difficult to assess its impacts in the system. Given that, what advance planning could have been feasibly done in March?
 - Reclamation acknowledged the difficulty in guaranteeing amounts early in the season and suggested using "what-if" scenarios and expanding adaptive management to consider March actions.
- SWFSC reminded the group that pulse flows are most likely to have population level effects in the drier than average years. There is support to have pulses in wetter years, but the drier years where there are competing water needs are those where they are likely to be most useful. This year is a hard year to categorize, but hopefully participants can increase their comfort level with implementing pulse flows in drier years.
- USFWS shared that this is only the third year of implementing pulse flows under conditions that exceed 4 MAF so it was interesting and beneficial to have the pulse flow. They observed that having the pulse flow in conjunction with pulses/increase flows on other tributaries appears to have resulted in a huge increase in Delta survival; this is an important lesson for future years to coordinate on a larger scale.
- NMFS asked whether there were any temperature modeling results that were factored into the decision for no pulse flow.

- Reclamation shared that there were some initial runs and results will be shared with the draft TMP on April 30. Initial TDM results showed minimal impacts from additional pulse flows. It was the need for an early side gate pull (approximately a month earlier than usual) that prompted Reclamation's concern over additional water use for pulses.
- Reclamation also observed that in future years, there could be a deployment of HRL water in this period (up to 100 TAF even in dry years), which would be volume neutral from a reservoir point.
 - SWRCB asked how the HRL releases will interact with the storage levels in the bin framework.
 - Reclamation responded that they haven't worked through that yet.
- Friends of the River commented that this year is unusual but not a dry year. Despite the dry March, April has been wetter than predicted. They also stressed that the HRL water is intended to be an additional allocation, so the group should not think of it as a replacement for existing pulse flows under the PA.

Telemetry/Fish Update

The group discussed the following:

- SWFSC shared that an additional group of fish were released last week, during a small storm; that release group had exceptionally high survival to Sacramento. Storm pulses (with turbidity) may be especially beneficial over a pulse from reservoir discharge.
- SWFSC has heard from fisherman that turbidity does seem to play a big role in the success of striper bass' predation. The group should think about how to explore whether there is some kind of turbidity threshold that significantly improves salmon survival.
- SWFSC is continuing tagging this week and next, updating the website, and will provide a synthesis presentation on this year's pulse implementation at some point.
- USFWS shared that the short storm pulse produced notable movements across multiple species (lamprey, spring run, larval green sturgeon) and emphasized the need for more experiments.