



# Sacramento River Group – Spring Pulse Flow Planning Subgroup Meeting Summary

Tuesday, March 31, 2026, 1:00-2:10 p.m.

## Participants

- CDFW: Matt Johnson
- Defenders of Wildlife: Ashley Overhouse
- Friends of the River: Devon Pearse
- NMFS: Kyra Fitz
- SWFSC: Flora Cordoleani, Miles Daniels, Cyril Michel
- SRSC: Mike Deas, Yuen Lenh, Anne Williams
- USBR: David Ayers, Emelia Barnum, Elissa Buttermore, Michael Dixon, Andrea Hamilton, Randi Field, Mechele Pacheco, Tom Patton, Yung-Hsin Sun, Kevin Thielen
- USFWS: Matt Brown, Brett Galyean, Kevin Niemela, Robert Null, Bill Poytress
- WAPA: Eric Mork
- Kearns & West: Terra Alpaugh, Chelsea Cullen

## Action Items

## Key Discussion Topics

### Agenda Review

Kearns & West (K&W) noted that additional organizations have recently joined SRG and more new representatives are likely to join in the future. Therefore, in order to better orient participants to who is in the meeting, K&W is testing out starting meetings with a roll call by organization.

On March 30, Reclamation shared an updated Draft 2026 Pulse Flow Operations Plan. Today, March 31, SRSC shared a draft letter outlining their concerns with using any water for pulse flows this year given the end-of-September forecast.

## Pulse Flow Operations Plan

Reclamation provided an overview of current conditions:

- Keswick flows are currently at 4,000 cfs; slightly elevated inflows are anticipated with the current rain forecast.
- Shasta storage is currently at 4.1 MAF. The current short-term forecast is mostly dry for April, despite the immediate light precipitation and cooler temperatures.
- ACID has completed dam/flashboard installation; the current flashboards configuration is limited to flows below 14,000 cfs; any higher would need coordination to both remove and reinstall boards.
- Wilkins Slough is currently under 7,000 cfs, having continued to recede; there may be a slight increase in flows to 8,000 cfs with the current storm.
- Bend Bridge may peak around 7,000 cfs with the current storm.

Reclamation provided an overview of the pulse flow they have proposed in the draft Pulse Flow Operations Plan:

- A four-day pulse starting April 7 and releasing 10,000 cfs at Keswick to reach 11,000 cfs at Wilkins Slough, with daily ramp down thereafter of 15% per day, for an estimated overall pulse volume of ~35,000 AF. The modeling suggests this pulse would increase outmigration survival by 25% compared with no pulse.
- Reclamation will continue to coordinate and evaluate additional pulse flows through the SRG once an April operations forecast and draft temperature management plan is available.

Reclamation confirmed that this is a draft proposal, and they are open to hearing all feedback.

- USFWS asked if the April 7th date is flexible or not, because delaying the start one day to April 8th would allow the hatchery to finish tagging all the fish and allow them to benefit from the full length of the pulse.
  - Reclamation can adjust their plan to start on Wednesday 4/8 if that is preferable.
- SWFSC voiced support for a pulse to assist the Coleman hatchery fall run and to initiate outmigration of any wild Chinook ready to move before it gets hotter. They were also encouraged to hear that a later spring pulse is still open for consideration, because a late April pulse could be very beneficial for wild spring and fall run. Given the timing of the April forecast, however, the timing will be tight, so SWFSC encouraged the group to continue meeting and develop a proposal for a second pulse so that it is ready for consideration as soon as the April forecast comes out.

- SWFSC asked how certain Reclamation is that the flow at Wilkins Slough will reach 11,000 cfs and if additional coordination with the diverters is needed to ensure the target is met.
  - Reclamation responded that they're confident they will be able to hit 11,000 cfs at Wilkins Slough for the proposed early April pulse: Keswick is currently at 4,000 cfs and flows at Wilkins Slough are hitting 7,000 cfs, and there is good reason to believe that there will be more moisture in the system in early April because of the current storm. ACID will begin diversions on April 1, but they will be minimal in early April.
- NMFS expressed support for planning additional future pulses, given that using up to 100 TAF for a pulse will still maintain the current bin classification of 2b. They asked about why the 35,000 AF pulse described in the plan appears to reduce end-of-September storage by almost 100,000 AF.
  - Reclamation responded that calculation is an error, and they will correct it in the plan.
- Friends of the River echoed SWFSC and NMFS support for multiple pulse flows and more water for those pulses in order to increase likelihood of survival, and asked why Reclamation is only considering a single 35,000 AF pulse rather than the two 50,000 AF pulses analyzed in the temperature modeling, and whether plans are being made to reduce other deliveries if needed, as described in the ROD for years like this one.
  - In general, Reclamation is concerned about the potential uncertainties in the forecast, which could result in a worse end-of-September situation and being conservative as a result. He cannot personally address the question about the potential for reduced diversions, but this can be passed up the chain to FAWOG for discussion.
- USFWS asked if this proposal requires approval at the various venues such as FAWOG and SHOT.
  - Reclamation explained that any decision about a pulse flow is Reclamation's to make and they do not need consensus or approval within any of these venues; however, they want to hear the interests and concerns of other interested parties and try to be responsive to them where possible. SHOT was removed from the CVP's governance structure in Action 5. Instead, questions and topics from SRG are advanced to FAWOG for management level discussions. There's still a SHOT meeting, because the State's ITP retains a SHOT venue. But from the Action 5 perspective, SHOT does not exist anymore.
- SRSC asked whether the pulse water will be exported in the Delta or count as Delta outflow, and how COA accounting will treat it.

- Reclamation responded that it depends on the timing of the pulse and Delta conditions at that time. Early pulses might be partially recaptured if Folsom/American River adjustments are possible. Mid-April recapture is unlikely, and any pulse volume would go to outflow or to meet Delta requirements. It could contribute toward Chipps Island days and will help water quality, which in turn would help compliance with spring X2 requirements. As of April, the CVP will be misaligned with the State and COA accounting may be suspended, so the pulse flows would not be counted toward COA.
- SRSC reiterated the concerns outlined in their letter with implementing any pulse flows given the storage forecast for end-of-September, October, and November. They reminded the group that end-of-September storage is often not the lowest volume of the year. They are concerned with both the projected early loss of temperature control and the low carryover volume. They urged that the group continue to talk about tradeoffs between pulse flow implementation and flow options in the fall.
- USFWS voiced appreciation for the TDM estimates but asked how reliable the temperature and TDM modeling results are at this point in the year. They observed that some of the results are unusual and somewhat counterintuitive. Friends of the River made similar observations and pointed to the two pulse scenario as an example where the results did not make sense compared to the single pulse scenarios.
  - Reclamation responded temperature modeling is highly uncertain in the early season, and modeling anomalies are likely due to gate operations or scenario mismatches. In addition, the temperature scenarios Reclamation ran do not perfectly match the water-cost of the proposed pulses. Further analysis is needed and the modeling team will revisit scenario matching and interpretation.
  - USFWS suggested that any future pulse planning in April include assessing the impacts of the 50 and 75 TAF pulse flow volumes in storage or TDM forecasts in addition to the 90 or 100 TAF, noting the impacts of drawing water from different layers of the lake.
  - Reclamation observed that early April pulses will be pulling from the top, warmest layers of the lake, so presumably they should have the least impact on cold water pool.
- SWFSC shared that Reclamation's current flow estimates input into the model show that the last week they can generate 11,000 cfs flows at Wilkins Slough, while keeping Keswick releases under 14,000 cfs to protect ACID, will be April 21st. In addition, given the warm hydrology, a late April second pulse seems like it may result in higher survival for fish than waiting for May.

- Reclamation stated that it will be tight to have an April forecast completed by that week, but it is possible they could complete one by April 17th, in which case they could potentially implement a pulse by late the week of April 20th.
- SWFSC asked if monitoring data indicate wild spring run juveniles will be present for an April 21 pulse.
  - CDFW responded that Mill and Deer Creek screw trap monitoring has detected very few fish this winter, but that historically April 21 better aligns with outmigration for wild spring run juveniles.
- CDFW voiced their support for the early April pulse in order to improve the survival of the Coleman fish and try to avoid further fishery closures; in addition, the pulse will help protect the hatchery fish from striper predation. CDFW also voiced strong interest in consideration of subsequent pulses. Finally, they asked SWFSC if, given their research, it would be better to push the first pulse higher than 11,000 cfs at Wilkins to ensure survival advantages.
  - SWFSC responded that 10,700-11,000 is a threshold band, and going above that threshold when the water budget allows can strengthen survival benefits; wider margins reduce the risk of undershooting.

### **Next Steps**

- The facilitator asked participants to share their thoughts and priorities from today's discussion with their FAWOG and/or SHOT representatives.
- Reclamation will make a decision about an April 7 or 8 pulse flow after hearing FAWOG/SHOT perspectives.
- The SRG will continue meeting weekly to discuss the details of what a late April/early May pulse flow could look like, to be fully evaluated when an April forecast and draft Temperature Management Plan are available.