



Sacramento River Temperature Task Group

Spring Pulse Flow Planning Subgroup Meeting Summary

April 27, 2023

Participants

Agency	Attendees
CDFW	Crystal Rigby, Erica Meyers, Tracy Grimes
DWR	N/A
NMFS	Stephen Maurano
Reclamation	Elissa Buttermore, Derek Rupert, Emily Van Seeters, Tom Patton
SWFSC	Cyril Michel, Flora Cordoleani
Hoopla Tribe	N/A
SRSC	Anne Williams, Yuen Lenh
USFWS	James Earley, Matt Brown, Bill Poytress
Kearns & West	Mia Schiappi, Eric Holmes, Terra Alpaugh

Action Items

N/A

Key Discussion Topics with Summary of Perspectives, Outcomes, and Agreements

First Pulse Update

Reclamation provided a brief update on the first pulse.

- Releases from Keswick on the Sacramento River were approximately 3,250 cfs with an increase to 4,500 cfs on April 21 and a subsequent rise to 8,500 cfs on April 24.
- Shasta releases will increase to 9,000 cfs on April 29 with the intent to hold releases until the second pulse flow event on May 8.
- The larger pulse flow will be on May 8 at 13,000 cfs.
- Shasta Reservoir has reached 4.36 MAF; this leaves 7 feet of elevation available before the reservoir reaches maximum capacity. Inflow is expected to reach just under 20,000 cfs the weekend of April 29 due to snow melt resulting from rising air temperatures and precipitation.

Perspectives and questions shared by subgroup members included:

- Question (Q) (USFWS): What A.C.I.D. constraints may come into play if Shasta Reservoir has to increase releases?

- Reclamation explained that A.C.I.D.'s diversion dam may limit releases to 14,000 cfs. However, the concern is when Shasta Lake is full, and inflow exceeds releases, it may be necessary to exceed 14,000 cfs; in that case, flows will have to be reduced to pull additional boards before increasing flows again.
- Q (NMFS): Are operations modified in any way to accommodate the planned pulse?
 - Reclamation emphasized that operations consider downstream needs, but the plan is to hold Shasta releases at 9,000 cfs up until the pulse on May 8. If there was no planned pulse flow, then releases would ramp up slowly.
- Q (SWFSC): Will flows decrease after the second pulse?
 - Reclamation clarified that Shasta releases will likely hold at 13,000 cfs, but the final decision depends on the inflows to Shasta Reservoir.

Fish Monitoring Update

SWFSC provided an update on fish monitoring actions and reviewed data at the following url: https://oceanview.pfeg.noaa.gov/CalFishTrack/pageSpringPulse_2023.html

- Five groups will be acoustic tagged over the course of four weeks.
 - Before first pulse
 - Released April 18 and 19 (N = 251)
 - During first pulse
 - Released April 24 and 25
 - Between first and second pulse
 - Scheduled to release on May 2 and 3
 - During second pulse
 - Scheduled to release on May 12
 - Post second pulse
 - TBD
- Bend Bridge flows were approximately 8,000 cfs for the first release group. Flows then increased as the second group was released. Current flows are 12,000 cfs, which may impact the groups that will be released between the first and second pulse flows. Regardless, it will help shed understanding on flow and survival dynamics for the group.
- Given that the releases may not decrease, there may not be a "low flow" or control test group.
- Turbidity sensors are in the water.

- Coleman National Fish Hatchery (CNFH) released the bulk of their fall-run Chinook salmon production and the remainder of the winter-run Chinook salmon jump start production with the first pulse flow.
- The above average air temperatures have accelerated snowmelt releasing significant water into Sacramento River tributaries, notably Mill and Deer Creek. The above average stages are facilitating salmon movement through the system.

USFWS added the following information to the fish monitoring update:

- The fall-run Chinook salmon released out of CNFH on April 24 resulted in significant detections around 5:00 A.M on April 25 at Red Bluff Diversion Dam Rotary Screw Trap (RSTs). Fish detections included both of fall-run and spring-run Chinook salmon. RSTs were quickly pulled on April 25 due to the anticipated increased number of Chinook salmon in the traps and potential mortality concerns.
 - When there are mortality concerns the usual 24-hour sampling period is shortened to a randomized day and night sampling session. The day session was before the pulse flow and the night session overlapped with the arrival of 12,000 cfs flows at RBDD. The majority of night detections were adipose fin clipped or hatchery fish. No late fall-run Chinook salmon fry were detected.
- USFWS will begin sampling again on April 30.

Documentation

Kearns & West engaged the SRTTG Spring Pulse group in a discussion on where information will be documented highlighting two documents:

- Annual Summary of water supply and fish operations
- Shasta storage rebuilding and spring pulse document

Reclamation added:

- Two seasonal reports for Shasta operations
- Annual LTO compliance report which summarizes all the reasonable and prudent measures associated with the LTO for the entire CVP.
- Shasta Cold Water Pool Report
- Interagency Telemetry Advisory Group Report

Adjourn

Kearns & West thanked participants and confirmed that the SRTTG Spring Pulse Group does not need to meet again for the season.