

**Sacramento River Temperature Task Group (SRTTG) Meeting**  
**October 28, 2021 | 2:00 PM – 3:00 PM**  
**Meeting Summary**

***Participants***

Alyson Scurlock, Kearns & West	Kristal Davis-Fadke, CDFW
Craig Williams, SWRCB	Lauren McNabb, CDFW
Crystal Rigby, CDFW	Lee Bergfield, MBK Engineers/SRSC
Doug Killam, CDFW	Lewis Bair, RD108/SRSC
Erica Meyers, CDFW	Mike Deas, Watercourse Engineering/SRSC
Eric Danner, SWFSC/NMFS	Mike Prowatzke, WAPA
Garwin Yip, NMFS	Mike Wright, Reclamation
James Gilbert, SWFSC/NMFS	Miles Daniels, SWFSC/NMFS
Jeff Laird, SWRCB	Stephen Maurano, NMFS
Jeff Onsted, DWR	Suzanne Manugian, Reclamation
Jo Anna Beck, Reclamation	Taylor Lipscomb, USFWS
John Hannon, Reclamation	Terra Alpaugh, Kearns & West
Josh Hoines, Whiskeytown National Recreation Area	Thad Bettner, GCID/SRSC
Ken Kundargi, CDFW	Tom Patton, Reclamation
Kristin White, Reclamation	Vanessa Kollmar, CDFW

**Key Discussion Topics with  
Summary of Recommendations and Outcomes**

**Action items**

1. **Elissa Buttermore, Reclamation** - Update fall-run Chinook salmon redd dewatering estimates based on actual flows and present at 11/10 USST meeting.
2. **KW** - Send updated language to Reclamation for incorporation into the Sacramento River section of the Fish and Water Operations Outlook.
3. **KW** - Cancel 12/23 SRTTG meeting.

**1. Introductions**

Terra Alpaugh, Kearns & West, welcomed everyone and reviewed the meeting agenda.

**2. Purpose and Objective**

In the Shasta Cold Water Pool Management Guidance Document, Reclamation “proposes to convene the Sacramento River Temperature Task Group (SRTTG), consisting of agency representatives having direct interest on cold water pool management on the Sacramento River, at least monthly February through October, 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.”

### **3. Prior Action Items**

Kearns & West reviewed action items from the previous monthly meeting (see below).

#### **Action Items from September 23, 2021**

Addressed

1. **Tom Patton, Reclamation** -
  - a. Distribute second vertical profile to SRTTG when available.
  - b. Continue to communicate weekly updates to SRTTG as the group reverts back to monthly meetings.
2. **KW** - Cancel remaining weekly SRTTG meetings and add monthly meetings for November-January to continue the monthly updates and start planning for next year.

Ongoing

3. **KW** - Schedule conversations with individual agencies to collect feedback on potential process and data improvements for next year’s temperature management season.
4. **River Fish Monitoring: 1) carcass surveys 2) redd counts 3) stranding and dewatering surveys.**

Doug Killam, CDFW, presented the river fish monitoring update.

- CDFW has begun their fall-run Chinook monitoring program and are seeing high fish counts. Fall-run Chinook spawning occurs much further downstream than winter-run Chinook spawning.
  - High flows in the river have created very turbid water which makes it difficult to mark shallow redds.
  - CDFW crews are conducting stranding surveys primarily for winter-run Chinook juveniles traveling downstream; crews have relocated fish from several high-flow stranding sites.
  - CDFW tracked about 60 shallow winter-run Chinook redds this season. All fish from shallow winter-run Chinook redds have had time to emerge; two out of the 60 were top dewatered.
5. **Fish Distribution/Forecasts: 1) Estimated percentage of the population upstream of Red Bluff Diversion Dam (RBDD) 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.**

Matt Brown, USFWS, provided an email update on fish distributions/forecasts for RBDD.

- Winter-run Chinook juvenile catch at RBDD has decreased. Overall passage for the season so far looks low compared to the number of spawners. At this point, about 75% of winter-run Chinook have passed RBDD on average.
- USFWS crews were off the water for two days due to the rain events.

Taylor Lipscomb, USFWS, presented the winter-run Chinook salmon distribution/forecasts update for Livingston Stone Hatchery.

- USFWS has moved the majority of juveniles at the hatchery from incubators into tanks. A total of 564,531 winter-run Chinook eggs were hatched for the mainstem Sacramento River Restoration Program, and there were 101,773 eggs for the Battle Creek Jumpstart Program; a hatch estimate for the Battle Creek Jumpstart Program is forthcoming.
- The emergency chiller rental program has not been seamless: numerous unplanned outages have occurred at the hatchery, many of which have been due to failings by the contractor who installed the chillers. Outages have resulted in temperature spikes at the hatchery, which have caused some coagulated winter-run Chinook salmon egg yolks.

The SRTTG reviewed the Fish and Water Operations Outlook language focused on the status of current species in the Sacramento River that is circulated weekly to the Delta monitoring teams. Reclamation has requested this be done at every meeting to ensure the Sacramento River-focused technical experts are providing their expert assessment of fish status to the monitoring teams.

Kearns & West will send the updated language below to Reclamation:

- Winter-run Chinook Salmon juveniles present
- Adult spring-run Chinook Salmon eggs in gravel
- Fall-run Chinook Salmon spawning, eggs and alevin in gravel, and some holding and waiting to spawn in November
- Late fall-run Chinook Salmon holding
- Green Sturgeon adults and juvenile present
- Adult steelhead present

## **6. Questions/Comments on Hydrology Update, Operations Update and Forecasts, and Temperature Management**

Tom Patton, Reclamation, asked participants to refer to the meeting materials for details and to ask any follow-up/clarifying questions. He provided a brief update:

- The October forecast does not include the recent large rain event; there may be slight adjustments to the forecasts coming in November.
- Reclamation is ramping down Keswick flows as fast as possible; flows are currently around 5,600 cfs and are on track to drop to 3,250 cfs by 11/13/21.
- The Anderson-Cottonwood Irrigation District (ACID) diversion dam boards are expected to be removed the week of 11/1/21 and could take up to two weeks for full removal.
- Shasta Reservoir has gained some storage due to recent storms.
- Water temperatures out of the TCD are close to 60° F; river temperatures are cooling due to recent storms and cooler air temperatures.

The group discussed the reason releases were higher this year compared to most other years.

- NMFS voiced interest in seeing flows drop down to 3,250 cfs (i.e., storage mode) as soon as possible but noted that flows typically are in the 7,000-9,000 cfs range during this time of year (with the exception of 2014).
- Reclamation explained that releases were higher than typical for this time of year mostly due to the transfer water that was not moved earlier in the year. Reclamation will try to communicate as much information on transfer water as early as possible in future years so the SRTTG can make informed recommendations. Delta conditions also have to be met when transfer water is moved; sometimes water that is moved for transfers has to be used for salinity instead.

## **7. Temperature Dependent Mortality**

The SWFSC presented hindcast estimates of temperature dependent mortality (TDM) for Water Year 2021. Key takeaways included:

- The RAFT model showed a slight cold bias in predicting temperatures during the peak months of observed spawning in June and July 2021.
- The 2021 observed redd distribution from CDFW has most redds located above the SAC gauge, while the 2012-2019 assumed redd distribution has redds located below the SAC gauge.
- Use of the 2012-2019 redd distribution produced an estimate of 77% TDM for the season and use of the 2021 observed redd distribution from CDFW produced an estimate 70% TDM for the season. Use of a linear interpolation of observed gauge data produced an estimate of 75% TDM for the season.

## **8. Upper Sacramento Scheduling Team**

The last Upper Sacramento Scheduling Team (USST) meeting occurred on 9/22/21.

- During this meeting, group members re-confirmed that flow Alternative J was the best path forward at the time, given the constraints presented by USBR.
- An ad-hoc USST meeting has been scheduled for 11/10/21 for the group to check-in once flows have dropped to 3,250 cfs and water temperatures have increased above 60°F.

The group discussed the following:

- Plan for Keswick release reductions/potential impacts to fall-run redd dewatering due to deviation from Alternative J flow schedule.
  - Reclamation – Initial flow reductions were pretty on schedule with the USST Alternative J flow schedule; there was a slight delay in flow reductions primarily due to an incoming storm and dry conditions in the Delta. Reclamation anticipates being able to continue reducing Keswick releases following ramping rates and the original flow schedule. Flows are anticipated to be down to 3,250 cfs in mid-November.
  - Fisheries agencies would like to receive more communication about operations since the USST is no longer meeting weekly. There is a small window to protect

fall-run Chinook eggs and fry emergence in November. They suggested that Reclamation calculate fall-run Chinook redd dewatering estimates based on actual flows and present at the next USST meeting.

- Dropping flows to conserve Shasta storage for next year/constraints of the Coordinated Operating Agreement (COA).
  - Reclamation – Transfer water is projected to be completely moved by 10/31/21. Reclamation continues to reduce Keswick releases, and has ramped up pumping in the Delta the last few days and anticipates continued pumping as long as the Delta stays fairly clean. If more water in the Delta is needed, Reclamation’s expectation is that additional water would come from the State Water Project (SWP) since the SWP owes the Central Valley Project (CVP) around 400 TAF of water through COA from WY21.

## **9. Review Action Items**

Terra Alpaugh, Kearns & West, reviewed the action items.

## **10. Future Meeting Scheduling**

The next monthly meeting will be held on Thursday, December 2, 2021. The December monthly meeting will be canceled due to the holidays; the SRTTG will reconvene in January 2022.