

**Sacramento River Temperature Task Group (SRTTG) Meeting**  
**Thursday, August 25, 2016 | 1:00 pm – 2:00 pm**

**DRAFT MEETING SUMMARY**

**Participants**

- Craig Anderson, USFWS
- Matt Brown, USFWS
- Miles Daniels, NMFS
- Eric Danner, NMFS
- Vadim Demchuk, SWRCB
- Ken Emanuel, SWRCB
- Josh Israel, USBR
- Liz Kiteck, USBR
- Andreas Krause, Yurok Tribe
- Duane Linander, CDFW
- Ron Milligan, USBR
- Jeff Rieker, USBR
- Jason Roberts, CDFW
- John Rueth, USFWS
- Jim Smith, USFWS
- Brycen Swart, NMFS
- Thuy Washburn, USBR
- Garwin Yip, NMFS
- Paul Zedonis, USBR
- Mike Harty, Kearns & West  
(Facilitator)

Note-taking:

1. Briana Seapy, Kearns & West

**Action Items:**

1. Kearns & West will distribute compiled SRTTG feedback on group purpose and membership.
2. USBR will distill SRTTG feedback and bring to SWIM for discussion.
3. USBR will re-connect with the Settlement Contractors to discuss their interests and possible paths to engage with them and receive information from them outside of the SRTTG.
4. USBR, with help from other agencies, will develop a timeline of key dates and factors that could inform the date for an annual review technical report deadline.
5. USBR will agendize the following two items for the September 22<sup>nd</sup> SRTTG meeting: 1) SRTTG membership and purpose, and 2) technical report drafting and deadline.

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

***Fishery Update***

CDFW summarized the status of winter run carcass observations for the latter half of August, noting that carcasses are being observed by CDFW and USFWS surveyors later than usual. CDFW suggested that there is potential winter run fry emergence to continue through mid-November based on the observed late carcasses and cooler water temperatures. Aerial surveyors are not observing many redds due to unusually poor water visibility.

USFWS reported on brood stock collection for the Livingston Stone National Fish Hatchery, noting

that spawning was completed on August 1, which is later than normal. Spawned eggs will remain in incubators in Gleason until at least October 15. In total, 56 females and 85 males were spawned. Egg to fry survival rate through the first thirty days was 94%. Female fish were generally smaller than usual this year and produced an average of 3,500 eggs per female, which is lower than usual. Most of the returning females were two-years-old, which is similarly unusual for Chinook but could explain the low fecundity rates. USFWS expects to release 160,000 to 180,000 fish in February.

USFWS reported that the high percentage of hatchery fish in broodstock was also abnormal this year, and noted that the regular method for calculating the number of eggs deposited naturally in the Sacramento River may not apply this year, because many 2-year old returning female Chinook are unlikely to have spawned in the river. A subgroup has been assigned the task of developing a new methodology for calculating the number of eggs spawned in the Sacramento River.

USFWS also reported that winter run juveniles are beginning to show up in the Red Bluff Diversion Dam rotary screw traps and that the numbers have steadily increased since last month. Bi-weekly counts are posted to the USFWS website at [https://www.fws.gov/redbluff/rbdd\\_biweekly\\_final.html](https://www.fws.gov/redbluff/rbdd_biweekly_final.html). Early trends suggest that the numbers are higher than those seen at this time of year over the last five years. It is too early for USFWS to reliably predict total run numbers; these are expected to increase through September and dwindle in October until a large number of winter run juveniles show up in October's 'first flush.'

USFWS also updated the SRTTG on spring run population estimates for the year. USFWS was concerned that 97% of the adult spring run in Clear Creek were estimated to be downstream of the temperature control point at Igo. There was an effort (with the permission of fisheries agencies) to operate the reservoir to increase the Clear Creek temperatures downstream of the control point to encourage fish migration to upstream habitat. USFWS noted that lower watershed temperatures were warm at the beginning of the season, and the impact of the Spring Creek control curtain is uncertain. The data suggest that the fish have disappeared since that time, meaning they are no longer in the lower watershed and they did not show up in the upper watershed according to field surveys. Fish presence in the lower watershed gradually decreased since June. There was one non-hatchery carcass recovered, suggesting that some of those 'disappearing' fish are dead.

USBR commented that temperature strings have been put in place to evaluate the Spring Creek control curtain performance.

### ***Hydrology & Operations Update***

*(See August 25 Meeting Agenda and Handout for the following reference materials: Mean Daily Water Temperatures; Redding 10-day Forecasted Air Temperatures; Sac River Gage Temp Plot and Air Temp Plot; Lake Shasta Isothermalbaths Plot; 7 DADM; Lake Shasta Current TCD Configuration; information is available on CVO's web-page)*

USBR reviewed system water temperatures, Lake Shasta isothermal baths, and the Shasta TCD

configuration and commented that water temperatures are staying fairly cool, in part due to cooler air temperatures and the TCD configuration. Ball's Ferry is tracking below 55.0° F on a daily average, well under the 56.0° F limit, and Lake Shasta isothermal baths appear normal.

USBR reviewed the current TCD configuration. As of August 19, one middle gate was open and four lower gates (Pressure Relief Gates) were open; all upper gates were closed. USBR is prepared to close the last middle gate and open the final lower gate if a warming trend initiates, but USBR will delay this action until it is necessary.

USBR reviewed 7 DADM water temperatures, commenting that both SAC and CCR are back to tracking below 55.0° F after a mid-month warming trend caused CCR 7 DADM temperatures to exceed 55.0° F temporarily.

### ***Sacramento River Modeled Temperature and August Temperature Studies***

*(See August 25 Meeting Agenda and Handout: Sacramento River Modeled Temperature; Redding Average/Maximum Daily Air Temp)*

USBR indicated that to maintain 52.0° F or cooler at KWK, the approved Temperature Plan includes a 10,000 cfs monthly average Keswick release in August (subsequent approval for monthly average of 10,500 cfs), 9,000 cfs in September, 6,500 cfs release in October, and 5,500 cfs release in November. USBR is proposing an alternative 9,500 cfs monthly average release in September, 8,000 cfs release in October, and a 5,500 cfs release in November. (The proposed November release is the same as the Temperature Plan November release, but September and October releases differ from the approved plan).

The model run in the materials provided is based on USBR's proposed releases, not the approved Temperature Plan releases. The model run suggests that USBR's proposed releases are sufficient to meet the 56.0° F daily average temperature limit at Ball's Ferry. USBR commented that the Trinity River temperature should remain under the temperature limits at the temperature compliance points (based on this model run, with increased flows starting September 16 at 56.0° F at PNK) without increasing diversions through the tunnels.

### ***Klamath Update***

USBR provided an update on a salmon Ich disease in the Klamath River. Beginning in August, repeat samples of adult salmon in the Klamath showed signs of Ich. After public comment was received, USBR started to implement the proposed action identified in the EA. The proposed action was flow augmentation from Lewiston that started at 450-750 cfs releases and increased to 1,000 cfs on 8/25 to decrease the risk of disease outbreak that would cause adult mortality. This 1,000 cfs is a preventative base flow. The flow was expected to be increased from Lewiston to 1,200 cfs on 8/26, bringing additional cold water benefits to the Lower Klamath (yielding flows of 2,800 cfs at KNK) that will provide refuge for incoming adult fall run salmon. A secondary preventative, 1-day pulse of 3,400-

3,500 cfs from Lewiston is the next stage that would be triggered in early December based on disease triggers. Finally a third emergency release flow is built into the EA, but will hopefully not be needed.

### ***General Discussion***

On the topic of SRTTG membership, USBR indicated that Settlement Contractor and third party requests for participation in the SRTTG have diminished. USBR is evaluating an option to involve those parties via a separate input process to inform pre-season USBR planning.

USBR received feedback on SRTTG membership and purpose from a number of SRTTG members and will bring distilled feedback to the next SWIM Team meeting. This topic of conversation will be included on the next SRTTG agenda.

NMFS raised the topic of the technical report that is due by the end of August from the SRTTG for the annual review process. USBR suggested that the due date is not conducive to sharing complete information and allowing full team review. The preference for an alternative deadline was discussed by USBR. NMFS indicated that the deadline for the report has been discussed in the past, but it has not been changed for this year. NMFS also commented that the report is intended to inform decision making at the start of the new water year.

USBR will agendaize when the reports should be developed and submitted for discussion on the next SRTTG call. The inter-agency aspect of the multiple technical reports requires input from multiple perspectives about factors that could drive an optimized report due date. These factors include information gathering and processing timelines, key management decision points, and inter-agency/process impacts. With the help of other agencies, USBR will develop a timeline to identify these key factors and inform the September conversation on the technical report.

### ***Next Meeting***

The next meeting of the SRTTG is scheduled for Thursday, September 22 at 1pm. This meeting will be held in the CVO office in Sacramento with the option to participate via conference call.