

Sacramento River Temperature Task Group (SRTTG) Meeting
Thursday, August 23, 2018 | 1:00 pm – 3:00 pm

MEETING SUMMARY

Participants

Lauren Adams, Reclamation	Kenneth Kundargi, CDFW
Craig Anderson, USFWS	David O'Connor, Reclamation
Matt Brown, USFWS	Michael Prowatzke, WAPA
Miles Daniels, NMFS	Ryan Revnak, CDFW
Kyle De Julio, Yurok Tribe	Alessia Siclari Melchor, SWRCB
Vadim Demchuk, SWRCB	Jim Smith, USFWS
Brandon Demuth, USFWS	Mary Suppiger, Reclamation
Randi Field, Reclamation	Garwin Yip, NMFS
Sarah Gallagher, NMFS	Paul Zedonis, Reclamation
Josh Israel, Reclamation	

Key Discussion Topics with Summary of Outcomes and Agreements

Meeting Purpose and Overview

Reclamation reiterated the meeting purpose: members of the Sacramento River Temperature Task Group are provided status updates on Sacramento River seasonal temperature targets and anticipated performance.

Fishery Update

Ryan Revnak from CDFW provided an update on their aerial redd surveys. They have not be able to conduct aerial surveys since the Carr Fire due to poor visibility. They have been performing shallow water surveys via boat. The shallow water surveys identified 4 winter run redds that are currently in less than one foot of water. Two of these redds were located at RM 289, one of them is in 6 inches of water, while the other in is 6.5 inches of water. The other two are in 10 and 12 inches of water, both located between RM 297 and 298, which is downstream of the ACID Dam and upstream of the HWY 44 bridge. The most recent redd was marked and observed on August 14th, while the shallowest was located on Aug 3rd.

Jim Smith from USFWS provided the following updates to the Livingston Stone National Fish Hatchery as of August 10th (sent via e-mail):

“Here is an update for 07/20/18 to 08/10/18.

We have spawned a total of 49 females that we collected from Keswick Dam Trap, these 49 females were crossed with 4 different males. We also had 11 prespawm females. This gave us the 60 females we are allowed to collect, of those 60 females only 10 were natural returning fish.

For the males, we spawned 89 males and we had 31 prespawm males. This gave us the 120 total males we are allowed to collect from Keswick Dam Trap, of the 120 males only 16 were natural returning fish. Of the 16 returning natural males, 12 were jacks. We collected a total of 20 jacks.

We did cryo preserve the milt from 34 of the males, for future use, either on captive brood or future Keswick fish.

So far, we have counted the eggs from 29 females. We had a total of 149,251 eggs and 143,532 eyed eggs, 96.17% eyed. We also had 3 females with soft shell, 2 are not included in the totals.

We have also counted the fry/swim up from 5 females and have 21,781 fry. Which is 95.39% from eyed eggs and 89.35% from total eggs for those 5 females.

I left in this chart for reference.”

	Female	Male
Natural Origin	10	16
Hatchery Origin	50	104
Total	60	120
Jacks/Jills	0	20
On Hand	0	5
Spawned	49	89/84 died
Prespawn	11	31
Still Needed	0	0
Season Goal	60	120

Status Update on Operations and Emergency Fire Activity

Randi Field from Reclamation provided an operations update. As a result of the Carr Fire, several CVP facilities have been affected and operations have been modified. Reclamation is working to restore operations and communications at the facilities that were affected. Trinity, Carr, Spring Creek Power Plant, Spring Creek Debris Dam, and Keswick were those facilities that were affected. Shasta Dam was mostly left untouched. Reclamation has been restoring capabilities at our facilities. However, some of our communications systems are still not functional. Many of the issues were related to power lines that were destroyed in the fire. Most of the lines have been replaced, and Reclamation estimates operations are 90 – 95% back to normal. As a result of on-going recover efforts, releases from Lewiston are starting to make their way back to the ROD flow regime.

Hydrology and Operations Update

See Meeting Agenda and Handouts for reference materials.

Randi Field from Reclamation reviewed system operations, temperatures, trends, Lake Shasta isothermal baths, Lake Shasta cold water pool volume, and the Shasta Temperature Control Device (TCD) configuration. Past and expected future operations and forecasted conditions were also discussed. Seasonal release patterns from Keswick Dam are consistent with previous month expectations. Releases from Keswick Dam have been reduced in the last few weeks and are currently managed to 9,500 cfs. Further release reductions are expected to occur and future expectations are an average a monthly release of 8,000 cfs in September. Reclamation will coordinate with the fishery agencies, as in past years, as the concern for de-watering winter run redds increases.

Temperature Management

See Meeting Agenda and Handouts for reference materials.

Active temperature management is continuing; Reclamation is managing to 53.5°F daily average temperature (DAT) at the CCR gage and 56°F DAT at Balls Ferry. Currently, one middle gate, and all of the pressure relief gates (PRG) are open on the TCD. Reclamation is continuing to decrease the usage of the middle gates and moving towards blending the coldest water with the PRG gates.

Temperature operations have been running with approximately a monthly mean daily average around 54.7°F, to date, in August at Balls Ferry. The approximate monthly mean daily average at the Sacramento River above Clear Creek (CCR) is 53.3°F DAT, to date, in August.

In the short term, the air temperature forecast for the Redding area is expected to be below normal. Due to ongoing fire activity in the area, smoke and haze will help keep the water temperatures lower.

The isothermobath cold water pool observations are expected. Nothing is currently a cause of concern with the isothermobath. The cold water pool volume < 48°F degrees has consistently been less than average since the spring, but now appears to be approaching the average volume. This could be as a result of less intense heating in the month of June, and the smoke and hazy conditions.

Temperature Studies

Reclamation is still focusing on the 90% runoff exceedance forecast as the 50% runoff exceedance forecast is nearly identical through the end of the water year. Recent model runs show target temperatures at CCR and BSF as achievable, however end of September cold-water-pool volume information used to supplement known limitations of the temperature model in the fall period suggest some moderate caution. Based on yesterday's profile, seasonal temperature management is optimistic. Both runs, which vary meteorology, are similar and are consistent with past model runs.

Additional Items

- Matt Brown was interested in Clear Creek operations and requested that Reclamation release from the upper gates in order to preserve the cold water pool and separate spring run chinook by encouraging fish to occupy the upper reaches of Clear Creek.
- The Pit River near Montgomery Creek (PMN) temperature gauge has been down due to access issues due to the Montgomery Fire. Reclamation is working towards a solution for continued monitoring.
- Annual Review Report – Randi is volunteering to be coordinator. Garwin Yip volunteered Sarah Gallagher to assist with the biology portion of the report. A one day update workshop will be held on December 5th from 1:00-4:00 pm; Nov 4th is the deadline to post the annual reports online.

Next Meeting

The next regularly scheduled meeting is September 27, 2018 from 1:00 pm to 3:00 pm, in Sacramento at the Joint Operations Center.

Addendum

- Reclamation has downloaded HOB0 files for PMN and are available by request. The data contain an initial period where the sensor was exposed to air temperatures due to extreme stage

fluctuations and the sensor has since been repositioned.

- Following the SRTTG meeting CDFW confirmed the final Winter-run aerial redd survey was conducted on August 30, 2018.