



American River Group

1:30 PM – 3:30 PM

Conference Line: +1 (321) 209-6143; Access Code: 985 598 947#

Webinar: [Join Microsoft Teams Meeting](#)

Thursday, May 18, 2023

Notes

1. Action Items

- a. Thuy Washburn – Draft narrative aspects of the Temperature Management Plan for the June meeting.
- b. Thuy Washburn – Share the June profile with Vanessa Martinez for new model runs.

2. Introductions

- a. USBR: Thuy Washburn, Melissa Vignau, Zarela Guerrero, Mechele Pacheco, Spencer Marshall, Brad Hubbard, Liz Kiteck, Nadira Kabir, Carolyn Bragg
- b. NMFS: Barb Byrne
- c. USFWS: Paul Cadrett
- d. CDFW: Crystal Rigby, Jason Julienne, Mike Healey, Jennifer O'Brien, Duane Linander, Tracy Grimes, Chris Ronshausen, Taiga Yamaguchi, Mike Healey
- e. SWRCB: Reza Ghasemizadeh
- f. Water Districts: Tony Barela, Michelle Banonis, Greg Zlotnick, Paul Helliker, Tom Boardman
- g. City of Sacramento: Brian Sanders
- h. City of Roseville: Sean Bigley
- i. City of Folsom: Marcus Yasutake
- j. DWR: John Ford, Kevin Reece

- k. WAPA:
 - l. EBMUD: I-Pei Hsiu
 - m. SMUD: Tyler Belarde
 - n. PCWA: Ben Barker
 - o. FishBio:
 - p. Water Forum: Erica Bishop, Jessica Law, Chris Hammersmark, Ashlee Casey, Vanessa Martinez, Craig Addley
 - q. PSMFC: Logan Day, Hunter Morris
 - r. CFS:
 - s. Shingle Springs Band of Miwok Indians: Zach Gigone
 - t. Other: Rod Hall, DeDe Birch, Joshua Jaco, Ted Rauh, Anne Sanger, Jennifer Buckman, Liana Huang, Todd Plain
3. Fisheries Update
- a. CDFW provided updates
 - i. Juvenile salmonid surveys
 1. 12 monitoring sites are monitored once a month.
 2. 82 juvenile Chinook salmon and 11 Steelhead have been observed.
 3. The primary method of surveying is seining. Snorkel surveys may occur later.
 4. Next week's survey may be postponed due to high flows.
 - ii. Nimbus Fish Hatchery
 1. Approximately 800,000 fall-run Chinook smolt were released into the lower American River on Tuesday May 16 at Sunrise. This included 500 acoustically tagged fish.
 2. Tagged fish information will be available on CalFish Track: <https://oceanview.pfeg.noaa.gov/CalFishTrack/>.
 3. The rest of the fall-run Chinook salmon production is going to be released at points within the San Pablo and San Francisco bays over the next several weeks.
 4. All Steelhead have hatched and are in the outdoor rearing troughs. They will remain there until mid to late June (the raceways need to be clear of fall-run Chinook before the Steelhead can be moved).

- iii. As of 5/13/23 the rotary screw traps are operating Monday-Friday but not on weekends given higher recreational use and this will continue through the duration of the sampling season.
- iv. Rotary screw traps (RSTs) were taken offline on 5/14 for recreation and high flows out of Nimbus Dam. RSTs will continue to be offline until flows decrease to 10,000 cfs.
- v. The majority of the unmarked Chinook salmon that have been caught have been par sized. Size ranges from 50 – 90 mm with an average of 65 mm.
- vi. Staff are consistently observing unmarked Steelhead that are averaging 40 mm.
- vii. Trap efficiency trials were done at 8,000 cfs with 1% efficiency.
- viii. RSTs will likely continue through mid-June, until water temperatures are too high or salmonid catch is zero.

b. Cramer Fish Science (CFS) provided updates:

- i. Juvenile surveys are continuing due to extended high flows and cooler temperatures.
- ii. No further Steelhead or stranding surveys have been conducted since April.
- iii. The annual Steelhead summary will be provided during the June meeting.

c. Question/Comments

- i. CDFW asked whether PSFMC plans to use the remainder of fish the hatchery has set aside.
 - 1. PSMFC responded they do not intend to use the remainder of the fish.
- ii. NMFS asked PSMFC whether they needed flows to be at a certain range to remove the RSTs.
 - 1. PSMFC responded that they installed the RSTs at 10,000 cfs and should be able to remove them at that level. They will need to look at conditions at the Howe and Watt boat launches.

4. Operations Updates

a. SMUD

- i. South Fork American River Watershed

1. Precipitation is above average at 79.34 inches for the year.
2. Snowpack is above average and inflow into the watershed will be at its peak over the next couple weeks.
3. An expected 330 TAF of inflow is expected but there is only approximately 50 TAF of storage available so they will continue to spill to make room for the inflow.
4. Temperatures are representative of water above Chili Bar Dam, which is the lowest spot on the Dam.

b. PCWA

i. French Meadows:

1. Storage is at 122 TAF.
2. Currently at the peak of inflows for the year.
3. Expected to spill next week at approximately 500 cfs
4. The Power House should be back online next week after maintenance outages.
5. A 7-day pulse flow of 400 cfs will occur at French Meadows. This is the first time they are doing this under their new FERC license.

ii. The R11 gauge below Oxford Powerhouse is running heavy at 5,000 cfs.

iii. Flows into Folsom Reservoir are approximately 10,000 cfs.

iv. Hell Hole is spilling at approximately 1,000 cfs.

5. Central Valley Operations

- a. American River releases are at 12,000 cfs. Inflows are slightly higher than releases to account for any inaccuracies in projected inflows.
- b. Folsom Reservoir storage is at 871 TAF.
- c. The upper layer of the reservoir is beginning to warm.
- d. Unit 2 shutters have not been placed in the down position due to debris issues. Logs are wedged in stations A and B. Because of this blockage, only the shutters in stations C, D, and E can be lowered. Divers will attempt to remove the debris.
- e. May inflows are above 7,000 cfs and slowly increasing storage.
- f. There is a likely chance of another precipitation event in May.

- g. Based on the 50% Forecast:
 - i. Average releases are 9,500 cfs.
 - ii. Releases in June are projected to be an average of 5,000 cfs.
- h. Question/Comments:
 - i. Regarding the debris blockage, NMFS asked if there is any way to stop the release of cold water (for example by not pulling water through Unit 2)?
 - 1. USBR explained that currently the total release out of Folsom requires the use of Unit 2, but stations C, D, and E should be down by tomorrow.

6. Temperature Modeling

- a. The ARG reviewed the temperature model runs attached to the end of this meeting summary from CBEC (using ICPMM) and Stantec (using CE-QUAL-W2).
- b. The runs using the CE-QUAL-W2 model evaluated:
 - i. USBR 50% and 90% exceedance forecast information
 - ii. May 3 vs May 16 reservoir profile information
 - iii. Four options of meteorological data (2010, 2014, 2017, 2020)
 - iv. A few temperature target schedules
 - 1. Note: the scenarios evaluating alternative temperature targets used the 90% USBR exceedance forecast information, the May 3 reservoir profile (due to time constraints modeling wasn't updated to use the May 16 profile), and 2014 meteorology.
- c. Results from both modeling approaches show that water temperatures in the mid-60's can be maintained at Watt Avenue throughout the summer and fall, and that the cooler summer targets result in warmer water temperatures in late fall.
- d. Because the modeling shows that active shutter management will not begin until mid-July or later, a decision on shutter operations does not need to occur until the end of June. The ARG agreed to wait until the early June reservoir profile and associated updated temperature modeling before providing final feedback regarding the summer-fall temperature management plan.
- e. Questions/Comments

- i. CDFW asked if there is any information regarding how these model runs translate to Hazel Avenue temperatures.
 1. The modelers explained that those data weren't plotted but could be provided and noted that in general Hazel will be about 2 degrees cooler than Watt.
- ii. CDFW suggested that ARG members should consider how fall-run Chinook adult holding and early life stages will be affected when evaluating the model runs. Ocean abundance is poor this year and as a result there will likely be a statewide fisheries shut down. The goal for this wet water year should be to operate for the success of spawning in-river and in the hatcheries. The hatcheries have been impacted by poor egg quality because of the drought and lack of mature females.
- iii. CDFW commented that the water temperature in October (i.e., before most fall-run Chinook salmon spawn) is also important since it affects egg quality and maturation. The model runs suggest that allowing temperatures to get warmer during the summer will allow for cooler water in October.
- iv. USBR confirmed with ARG that the preliminary target scenarios for the draft Temperature Management Plan (TMP) are either 67 degrees or 68 degrees at Watt.
- v. Although there is a lot of cold water this year it is still unlikely that water temperatures will get as low as 65°F in the summer (for rearing of *O. mykiss*) or 56°F in the fall (for holding and spawning of fall-run Chinook adults and incubation of fall-run Chinook eggs).
- vi. NMFS commented that it is possible that a power bypass may still be necessary despite the very wet hydrology and good storage.
- vii. NMFS suggested that USBR draft the TMP narrative but leave placeholders for the exact temperature targets until updated modeling is reviewed at the June ARG meeting.
 1. USBR confirmed that this timing is feasible based on when the June Forecasts come out.
- viii. NMFS asked if the debris will be removed before the modeling occurs so that it can be assumed in the runs.
 1. USBR responded that the goal is to remove the debris this week.

The next regularly scheduled ARG meeting is on **Thursday, June 15 from 1:30pm-3:30pm.**