

American River Group

1:30 PM - 3:30 PM

Conference Line: +1 (321) 209-6143; Access Code: 780 506 355#

Webinar: Join Microsoft Teams Meeting

Thursday, May 27, 2021

Ad Hoc Meeting Notes

1. Action Items:

- a. Jason Julienne schedule a call with NMFS, CDFW and USBR regarding fish evacuations.
- b. Chris Hammersmark prepare temperature scenarios for next Thursday's call.
- c. Barb Byrne email Levi and Janice with interim technical assistance regarding temperature management

2. Introductions

- a. USBR: Levi Johnson, Carolyn Bragg, Sarah Perrin, Drew Loney, Ian Smith, Derya Sumer, Thuy Washburn, Spencer Marshall
- b. CDFW: Tracy Grimes, Mike Healey, Jason Julienne, Morgan Kilgour, Kenneth Kundargi, Duane Linander, Gary Novak, Crystal Rigby
- c. NMFS: Barb Byrne
- d. PCWA: Benjamin Barker, Craig Addley, Darin Reintjes, Vanessa Martinez
- e. WAPA: Ammon Danielson, Mike Prowatzke
- f. Water Forum: Jessica Law, Chris Hammersmark, Paul Bratovich, Jeffrey Weaver
- g. SWRCB: Emily Fisher, Reza Ghasemizadeh

h. PSMFC: Logan Day

i. City of Sacramento: Anne Sanger, Brian Sanders, Brett Ewart,

j. City of Folsom: Marcus Yasutake

k. SARA: Clyde Macdonald

1. BKS Law Firm: Jennifer Buckman

m. Westlands Water District: Tom Boardman

n. Independent: Rod Hall

o. K&W: Rafael Silberblatt, Kai Walcott, Susan Ellsworth

3. Temperature Updates

- a. USBR provided current water temperature data, noting that the water has warmed considerably and water temperatures at Hazel Avenue are anticipated to reach 67°F over the weekend. In 2015, the temperature target was 71°F at Hazel and USBR was able to meet that. This target may be harder this year because the cold water pools are not comparable. Another lake profile will be provided on Tuesday, June 1.
- b. USBR noted that its iCPMM model run targets Watt Ave, uses historical meteorology and B-120 inflows while the Water Forum's iCPMM run targets Hazel, uses 2014 meteorology and PCWA/SMUD 90% inflow data.
- c. The Water Forum provided an overview of its model runs, with and without a fall Folsom power bypass noting that with the latest flows, meeting 69°F will not be possible in the summer. The Water Forum distributed a memo on 5/24 that documents the runs considered and indicates that 69°F is the best case scenario (based on last week's flows) but is likely to be exceeded.

Questions/Comments:

- a. In response to questions, USBR provided the following clarifications:
 - USBR's current operational forecast projects an end-of-September Folsom storage around 200 TAF; the USBR iCPMM runs project an end of September storage of 172 TAF because those runs do not consider updated operations information.
 - USBR confirmed the latest forecasted flows out of Folsom for May: 950 cfs, June: 1929 cfs, July: 2406 cfs, August: 1961 cfs, Sept: 592 cfs and October: 550 cfs. Declining water temperature in October is mostly driven by low flows approaching equilibrium with ambient air temperature.
- b. Group appreciated the adjustments to try to capture expected conditions in summer 2021, but general agreement that need to consider the potential for actual conditions to be worse than modeled.

- c. CDFW noted a big difference between the inputs of meteorological data was that the Water Forum's model used data from 2014 and USBR's model used the 30-year average.
- d. BKS Law noted a significant difference from the last forecast which aimed to keep 200 TAF in Folsom at the end of September. There will be temperature implications with Folsom this low. BKS isn't confident regarding the inflow numbers and requests adjustments.
- e. There was discussion regarding the potential for deganging the middle and bottom shutters and a power bypass in the fall:
 - The Water Forum noted that their forecast includes pulling the middle shutters on July 2nd when SMUD drains Union Valley reservoir for boat ramp maintenance.
 - USBR indicated that it will consider a potential power bypass but does not yet commit to one.
 - USBR noted that due to low storage, deganging the lower gates may have little impact but deganging the middle gates may provide a benefit in terms of conserving cold water for later in the year. Reclamation will continue to review updated lake profiles and adjust accordingly.
- f. PCWA noted that their internal temperature models provide results similar to those of USBR and the Water Forum (albeit show a sustainable summertime temperature threshold closer to USBR's 71°F).
- g. CDFW noted that current temperature projections are associated with water temperatures in some reaches of the lower American River that approach or are at lethal levels for steelhead, asked when a temperature management decision can be expected and indicated that they aren't prepared to provide a recommendation without more information about options for lowering temperature in the fall for Chinook salmon spawning.
- h. ARG members discussed hatchery management options given quickly rising temperatures:
 - USBR indicated that it anticipates water temperatures at the hatchery water intake hitting 68°F around June 10th
 - CDFW urged maintaining cooler temperatures until hatchery fish are evacuated to the Mokelumne facility as fish on medicated feed can't be evacuated and higher temperatures increase the likelihood of needing to go on medicated feed.
 - ARG members discussed possible means of maintaining cooler temperatures in the near-term, including lifting the middle gate, blending, and a Nimbus bypass. USBR indicated that it is too late for any of these management actions to impact temperatures this weekend.
 - USBR noted that they have approval to move the fish pending receipt of a plan from CDFW.

- CDFW indicated that they have a plan prepared and are hoping to start hatchery evacuations on 5/28/21.
- i. NMFS recommended targeting the coolest temperature that can be maintained through mid-October and proposed a target of 70° or 71°F.
 - PCWA noted that 2015 temperatures exceeded 70°F degrees at Hazel and this year is unlikely to be better.
 - The Water Forum indicated that 70°F is likely a best-case scenario as 2015 flows were higher than current projections. The Water Forum doesn't disagree with a target of 71° and suggested the group should consider the likelihood of reaching 71° in June if a shutter isn't pulled.

4. 6/3/21 Ad Hoc Call Preparation

- a. It was proposed that the Water Forum develop various temperature models to share at a follow-up ad-hoc meeting on 6/3.
- b. CDFW expressed interest in modeling aligned with a temperature goal of 65°F in mid-October and 56°F on Nov 1.
 - The Water Forum and PCWA noted that ambient fall temperatures and a
 potential power bypass will likely have a greater impact on achieving these
 targets than summer storage/flow management.
- c. NMFS expressed concern regarding temperatures potentially exceeding 70°F at Hazel over the next week.
 - USBR noted that it is too late to take any actions that would lower temperatures there in that timeframe.