

American River Group

9:30 AM - 11:00 AM

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

Webinar: Join Microsoft Teams Meeting

Wednesday, May 25, 2022

Notes

1. Action Items

- a. K&W include the temperature graphs shared by Cardno with the 5/19/2022 meeting packet
- b. USBR note in the water temperature target document an interest in revisiting water temperature management and power bypass sometime in August
- c. Thuy share a presentation regarding dam operations at an upcoming ARG meeting

2. Introductions:

- a. USBR: Ian Smith, Thuy Washburn, Carolyn Bragg, Brad Hubbard, Melissa Vignau, Spencer Marshall, Liz Kiteck, John Hannon
- b. NMFS: Barb Byrne, Katrina Poremba
- c. USFWS: Craig Anderson, Paul Cadrett
- d. CDFW: Crystal Rigby, Duane Linander, Emily Fisher, Gabe Singer, Gary Novak, Jason Julienne, Mike Healey, Tracy Grimes
- e. SWRCB: Michael Macon, Reza Ghasemizadeh
- f. PCWA: Darin Reintjes
- g. EBMUD: Max Fefer

- h. SMUD:
- i. City of Folsom:
- j. City of Sacramento:
- k. San Juan Water District:
- l. Westlands:
- m. City of Roseville:
- n. DWR:
- o. WAPA: Mike Prowatzke
- p. FishBio:
- q. Water Forum: Erica Bishop, Chris Hammersmark
- r. CFS: Kirsten Sellheim
- s. PSMFC: Austin Galinat, Logan Day
- t. Shingle Springs Miwok Band:
- u. Kearns & West: Rafael Silberblatt, Karis Johnston
- v. CSUS:
- w. HDR: Amanda Ransom, Paul Bratovich
- x. Cardno: Craig Addley, Vanessa Martinez
- y. BKSLawfirm: Jennifer Buckman
- z. Regional Water Authority: Michelle Banonis
- aa. Other: Rod Hall
- 3. Water Temperature Targets
 - a. Cardno modeled several temperature targets.
 - i. A target of 65° F at Hazel Avenue for the entire summer and early fall period, would achieve 62° F at Hazel by November 1.
 - ii. A target of 66° F through the end of September and 65° F in October would result in slightly cooler temperatures starting November 1 than in the scenario targeting 65°F over the summer and early fall.

- iii. Targets of 67° F and 68° F would result in fractionally lower temperatures in November, but the decrease wouldn't be significant relative to the scenario targeting 66° F through the end of September.
- iv. The shutter positions assumed for the 66° F model are in the "all in" position through late July, at which point reservoir elevation is low enough that all of the top shutters need to be lifted. This causes a "gulp" of cold water and a roughly 2–3-week reduction in water temperatures at Hazel to less than 66° F. By mid-September, the middle shutters are all lifted. Once the temperature target is lower in November, all of the bottom shutters would be lifted so that the water in Folsom Reservoir would be pulled exclusively through the bottom of the TCD providing 60° F to 62° F in the first two weeks of November. For lower water temperatures a power bypass would be necessary.
- v. Cardno also modeled a scenario targeting 66° F through the end of September with full deganging of the shutters. This avoided the "gulp" of cold water and resulted in cooler water temperatures during the fall, but Reclamation noted that the modeled operations would not be feasible based on dam operation constraints.

Questions/Comments

- NMFS supports a summer target of 66° F at Hazel but will want to revisit temperature management in August to explore fall power bypass options. NMFS is also interested in exploring deganging to avoid the big gulp in July when the top shutters get pulled due to reservoir elevation.
- USBR supports a target of 66° F at Hazel.
- USBR asked what the temperature decrease would be after the gulp at the end of July (i.e., when cold water is drawn)
 - Cardno responded that there would be a roughly six-degree F drop (from 66 to 60° F) in late July upon moving all units to the one up position.
 - USBR noted that if they were to degang (which they have extremely limited ability to do this year) it would take roughly one week with the top shutter out before the bottom panel of the top shutter could be deganged and dropped back in.
- CDFW inquired as to why this year doesn't qualify for deganging?
 - USBR noted that storage isn't low enough to qualify (storage must be below 428 feet). USBR will provide more background explanation of dam operations at an upcoming ARG meeting.
- NMFS requested further clarification regarding qualifiers for triggering alternative shutter scenarios. The biological assessment (p. 4-53) includes a conservation measure that says, "In severe or worse droughts, Reclamation proposes to evaluate and implement alternative shutter configurations at Folsom Dam to allow temperature

flexibility." NMFS is weighing whether to elevate this to WOMT, but recognizes that it may not be technically possible this year. Is there any possible configuration that is feasible this summer?

- USBR responded that there's just one position that is feasible, which is just to have the bottom panel of the top shutter down at one unit, with the top shutter of the other units up. With the time needed to do the work, the risks to the stems, and the limited savings of cold water, Reclamation questions the value of this operation. USBR will provide more background of dam operations at an upcoming ARG meeting.
- NMFS advocated for securing more stems for future years and suggested that the temperature management plan include language regarding the extent to which deganging is currently possible (or not).
- CDFW noted that a target of 66° F at Hazel should result in conditions that are favorable for keeping fish at the Nimbus hatchery.
- 4. The next regularly scheduled meeting will be moved to Thursday, June 23, 1:30pm-3:30pm.