

American River Group – Spring Pulse Ad-Hoc Meeting

9:00 AM – 10:00 AM Conference Line: +1 323-457-6502 Access Code: 108915037# Webinar: Join Meeting Here

Wednesday, April 14, 2022

Notes

- 1. Action Items
 - a. KW Provide updated Folsom Reservoir profile to Chris Hammersmark
- 2. Introductions:
 - USBR: Ian Smith, Thuy Washburn, Liz Kiteck, Drew Loney, John Hannon, Brad Hubbard, Melissa Vignau, Oliver Burges, Spencer Marshall, Leeyan Mao, Gary Pitzer
 - c. NMFS: Barb Byrne, Katrina Poremba
 - d. USFWS: Paul Cadrett
 - e. CDFW: Crystal Rigby, Jason Julienne, Emily Fisher, Mike Healy, Gabe Singer, Gary Novak, Nick Bauer, Duane Linander,
 - f. SWRCB: Michael Macon, Reza Ghasemizadeh
 - g. PCWA: Darin Reinties
 - h. EBMUD: I-Pei Hsiu, Max Fefer
 - i. SMUD:
 - j. City of Folsom:

- k. City of Sacramento: Anne Sanger, Brian Sanders
- 1. San Juan Water District: Greg Zlotnick
- m. Westlands:
- n. City of Roseville:
- o. DWR:
- p. WAPA: Mike Prowatzke
- q. FishBio:
- r. Water Forum: Chris Hammersmark
- s. CFS: Kirsten Sellheim
- t. PSMFC: Logan Day, Austin Galinat
- u. Shingle Springs Miwok Band:
- v. Kearns & West: Mia Schiappi, Karis Johnston
- w. CSUS: Dede Birch
- x. Other: Deanna Sereno (CCW), Craig Addley, Ron Stork
- 3. Spring Pulse Flow Discussion
 - a. NMFS provided background on the reasoning for doing a spring pulse flow on the American River.
 - i. The benefits of a pulse flow in the spring are to improve migratory conditions for salmonids. Specifically, it can help redistribute Chinook and steelhead juveniles. It will help juvenile Chinook that are ready to leave the river and help redistribute rearing fry to reduce density dependence and improve overall feeding and growth opportunities.
 - ii. The spring pulse flow is controlled by the FMS and should run mid-March or mid-April; however, the pulse flow will be later. The FMS requires the pulse flow be volume neutral, which means that the volume of the pulse will be made up in later months by reducing the MRR.
 - b. There is some debate about whether outmigration is better at the fry stage or at the smolt stage. There are studies that show that depending on the year, both types of outmigration can be successful returners.
 - i. One negative of a pulse this year is that Reclamation is planning to operate above the MRR over the next couple months because there

may be storage issues when temperatures become an issue later in the summer.

- ii. The pulse flow will cause a rise and fall in the river levels which will result in stranding. This year's pulse flow will be small and have less benefit.
- iii. The water temperatures have been an average of 56 degrees throughout April. This temperature is the threshold for good spawning conditions. Any steelhead eggs that are still incubating are fine, but conditions are becoming less suitable. Temperatures for rearing conditions will remain suitable throughout May.
- iv. Steelhead are currently at 75% emergence and there has been a lot of stranding surveys conducted with very small steelhead having been observed in the Sunrise side channel. When the steelhead are first emerging from gravel, they cannot move around too quickly. There may be a benefit to keeping the juveniles in the river longer to allow them to grow larger before they move downstream. It is also necessary to look at the downstream water temperatures because the fish will have to move through those temperature points as well. Freeport is usually the location that gets hottest the earliest, so the temperature at Freeport may help with the time a pulse to allow a maximum benefit.
- c. Reclamation is currently operating at 1,000 cfs. They plan to operate at 1,200 cfs out of Nimbus Dam after including the changes from the B-120 and the ease of standards from the TUCP. There are significant uncertainties that will affect any decisions moving forward including salinity and depletion in the Delta.
- d. Reclamation offered two operation scenarios for a spring pulse flow
 - Scenario 1: The spring pulse flow will start on 4/20 at 1,800 cfs for two days, will transition to 1,300 cfs on 4/22, decrease on 4/23 to 8,00 cfs, and will hold through April. On 5/1 flow will increase to 1,000 cfs to meet the volume neutral goal.
 - ii. Scenario 2: The spring pulse flow will start on 4/23 at 1,900 cfs for two days, will transition to 1,400 cfs on 4/25, will decrease to 900 cfs on 4/26, and decrease again to 800 cfs on 4/27. The 800 cfs would extend through May 3 and then increase to 1,000 cfs for the remainder of May.
- e. CDFW commented that based on the size of fish, the timing of the pulse, and the water neutral goal, the current pulse flow timeline is not an ideal time to have a pulse flow. There is more benefit to have a pulse flow in May because steelhead spawning will have ended, Chinook will be turning into parr, and smolt sized fish further down in the system will benefit from the water.

- i. Reclamation responded that there is no ability to do a pulse flow in May. There is no flexibility to increase or decrease, it will still need to be volume neutral and to meet Delta standards.
- ii. Reclamation is releasing as much water as possible through Unit 1 and will pull from Unit 2 as necessary, and Unit 3 as a last resort. The amount of release now will make a significant difference in water conditions throughout the rest of the season.
- Reclamation is trying to conserve as much of the cold water pool as possible. However, depending on what type of flows will be coming out of the Sacramento River, water may be required from the American River in order to meet Delta salinity requirements. NMFS asked if Reclamation will be able to provide temperature runs at the April ARG meeting.
 - Reclamation responded that Folsom Lake has not stratified yet. There will be a profile taken the week of 4/18 that will allow a model run.
- f. There was a consensus based on conditions and water availability; there will not be a spring pulse flow in April.
- g. If there is an opportunity, Reclamation will volunteer Folsom to increase releases to 1,800 cfs. It would not be a pulse, but an increase.

The next meeting is on Thursday, April 21, 1:30-3:30pm.