

Stanislaus River Fisheries Flow Discussion

Date: January 10, 2013

Time: 9:00am-12:00pm

Location: US Bureau of Reclamation

801 I Street, Suite 140

Bay Delta Office Conference Room

Call-in information: **(303) 445-3917**, code **3737**

Topics: Spring/summer temperatures and wrap-up

Agenda:

1. Spring and summer temperatures
2. Summary from previous discussions
3. Next steps and science needs

Conference #: (303) 445-3917; Password: 3737

Attendees:

Karna Harrigfeld - SEWD

Bill Paris - OID

Andrea Fuller - FISHBIO

Tom Fitzhugh - USBR

Paul Fujitani - USBR

Barb Byrne - NMFS

Janice Pinero - USBR

Patti Idlof - USBR

Sierra Franks - NMFS

Monica Gutierrez - NMFS

Ben Nelson - USBR

Patti Aaron - USBR

Kristin White - USBR

JD Wikert - FWS

Rachel Johnson - USBR

Sue Fry - USBR

David van Rijn - USBR

John Hannon - USBR

Max Sakato - SMWC

Walter Hanspoter - SL/DMWA

Drew Lessard - USBR

Melissa Vignau - USBR

Richard Stevenson - USBR

Tim Heyne - CDFW

Roger Guinee - FWS

Mary Johannis - USBR

Patti Clinton - USBR

Julie Zimmerman - FWS

Rhonda Reed - NMFS

On the phone:

Gwen Buchholz - CH2MHill

Jeff Shields - SSJID

Meeting Notes

Temperature

- The districts expressed concerns that the EPA guidelines for temperature cannot be met under certain conditions, specifically during October. The times when one may want to manage for temperatures, flows won't change the temperature in the rivers. At certain times, water being released may be warmer than the instream temperatures and may increase temperatures. The districts also addressed initiating measures on fish presence.

Models

- Existing temperature models have been used in the San Joaquin River Restoration Program (Dotan model) as well as other systems within the basin. The question was raised as to what models are currently being used in the Stanislaus River.
- Reclamation currently uses the Dotan HEC-5Q model to examine individual situations regarding the feasibility of meeting temperature requirements in the BiOp with flows.
- Daily and sub-daily models can provide the most precise estimates of what temperatures fish encounter in the Stanislaus River.
- NMFS is currently working with a Tetra-Tech to expand their river temperature model to be linked to the reservoir to address temperature in the Stanislaus River.
- SALSIM, a new model by CDFW, is scheduled for release towards the end of January, and will be utilized to investigate issues discussed.
- The possibility of training and webinars for involved parties to better understand the models was offered.

Daily Averages

- The 2005 BiOp used a 7 day average temperature. The updated BiOp uses a daily maximum temperature. The districts questioned why the change was made. NMFS responded that in accordance with Best Available Science practices, the decision was based on regional standards developed for EPA guidelines. Local research and historical averages and extremes were also looked at in the decision process. NMFS suggested the utility in better understanding daily and subdaily variation in temperatures to assess whether temperature refugia within a day are available to fish, which is also included in the EPA guidelines.

Operations

- Temperature Control Devices help insure cool water releases from reservoirs such as Shasta and Folsom Dams. Reclamation addressed operational limitations for temperature control at New Melones, such as earthen construction and the location of the intakes.
- Recent improvements to Tulloch Dam penstocks allow for cooler water releases. This change and its impact on the river will need to be modeled.

Temperature Significance

- Temperature affects salmonid physiology. The discussion focused on how temperatures are decided, specifically in regard to flows.
- The districts stated that outmigration cues may be based on extreme temperatures.
- FWS addressed the importance of size to the survival of salmonids. Larger fish can be expected under an optimal temperature window, including warmer temperatures for

food and thermal refugia for the health of the fish. Thermal diversity was stressed as important.

- The districts expressed concerns that extended temperature windows may result in outmigration during poor delta conditions, compared to more favorable conditions earlier in the year.
- CDFW stated that spawning is based on river temperatures, regardless of when the fish arrive. With a longer temperature window for rearing, young are able to grow and smolt, properly preparing them for poor delta conditions. The districts countered by stating salmonids use upstream habitat first, followed by downstream. FWS expressed additional concerns with shorter temperature windows resulting in increased egg and pre-spawn mortality.

Spreadsheet

- A preliminary draft spreadsheet was presented to show the RPA measures and the district proposed measures and areas of agreement and disagreement. The document will continue to be developed to reflect the perspectives of the parties involved.

Next Steps

The Remand schedule must continue as planned, regardless of the possibility of an extension. Absent an extension, this was the final Stanislaus River Focus meeting as part of the Remand process. Reclamation will continue transparent consultation with state and federal agencies as part of the process.

Development will continue on the spreadsheet to address areas of agreement and disagreement between the agencies and districts. Representatives from the District, NMFS, and USFWS agreed to send Reclamation their input to be added to the spreadsheet.