From: Maria Rea - NOAA Federal [mailto:maria.rea@noaa.gov]
Sent: Friday, April 15, 2016 12:25 PM
To: RMILLIGAN@usbr.gov
Cc: Kaylee Allen; Wilcox, Carl@Wildlife; Garwin.Yip@noaa.gov; Erin_Gleason@fws.gov; Leahigh, John@DWR; Dibble, Chad@Wildlife; Biggs, Charlotte@DWR; Stein, Russell@DWR; Kim_S_Turner@fws.gov; Barbara.Byrne@noaa.gov; ekiteck@usbr.gov; Thomas Patton; Jeffrey Rieker; Riddle, Diane@Waterboards; Satkowski, Rich@Waterboards
Subject: Re: Request for Concurrence - March 2016 TUCP and consistency with the Biological Opinions

Ron,

Thank you for your request for concurrence on the proposed flows, by month, at Vernalis. NMFS agrees that since VAMP expired in 2012, Reclamation has had a difficult time meeting the D-1641 required flows at Vernalis, especially since the minimum flows in the Tuolumne and Merced rivers are typically lower than those expected/contemplated as part of the VAMP agreement. As you know, the NMFS Biop contemplated that the SWRCB would have adopted new San Joaquin objectives at this point, and these objectives have been seriously delayed.

NMFS also agrees that given the current and projected storage condition at New Melones Reservoir, based on the volumes you identified, below, CCV steelhead would be better served with Reclamation conserving the water rather than releasing the volume of water to comply with the current D-1641 standard at Vernalis. Separately, we have reviewed and concurred on your request for adjustment to the San Joaquin I:E ratio associated with an additional release of 75,000 acre-feet of water. We concluded this action has a net benefit to San Joaquin populations of Central Valley Steelhead.

Other parties to this email chain may review that correspondence here:
http://www.westcoast.fisheries.noaa.gov/central_valley/water_operations/

- Maria

Maria Rea
Assistant Regional Administrator, California Central Valley Office
NOAA Fisheries West Coast Region
650 Capitol Mall, Suite 5-100
Sacramento, CA 95814
(916) 930-3600
Maria.Rea@noaa.gov

Find us online

www.westcoast.fisheries.noaa.gov

On Fri, Apr 15, 2016 at 7:47 AM, Milligan, Ronald <rmilligan@usbr.gov> wrote:

Maria and Kaylee (and Garwin and Kim),

Thank you and your staffs for your cooperative efforts to assist Reclamation with our ongoing drought operations. As you are aware, Reclamation has recently filed a Temporary Urgency Change Petition (TUCP) with the SWRCB to request modifications to the "San Joaquin River at Vernalis" flow objectives for this spring. A copy of the TUCP is attached. The purpose of the petition is to conserve storage in New Melones Reservoir while still providing critical spring flows for out-migrating salmonids.

(Please also note that Reclamation is in the process of modifying our TUCP to the SWRCB to withdraw our request to modify the Dissolved Oxygen objective for this summer.)

The drought conditions in the San Joaquin River basin have continued well into the spring of 2016, which has limited San Joaquin River flows at Vernalis and into the Sacramento-San Joaquin Delta. Reclamation has worked with the Stanislaus basin water districts to augment the currently scheduled Stanislaus River Appendix 2(e) flow releases with an additional 75,000 af during the pulse flow period this April and May. Unfortunately, these Stanislaus River flows will not be enough to meet the required D-1641 flow objectives given drought conditions and the minimal releases this year on the Tuolumne and Merced Rivers. The table below summarizes Reclamation's proposed Vernalis flows relative to the flows called for by D-1641 this year.

Dates	**Proposed Flows (cfs)**	**D-1641 Objective (cfs)**
April 1 – 14	1,000	2,280
April 15 – May 15	3,100	4,880
May 16 - May 31	750	2,280
June 1 -30	500	2,280

The D-1641 objectives are well above the flows forecasted this year despite the significant augmentation of flow from the Stanislaus River. Without approval of the requested TUCP, an additional release of approximately 192 taf would be required from storage in April and May, with an additional volume of 107 taf in June. Given the continued low reservoir storage at New Melones, this additional release would result in a very low lake level by September - lower than the lake level last year, impacting river temperatures this summer and limiting the ability to meet 2(e) flows into next the fall and 2017.

Our last estimate of end-of September storage at New Melones is 415 taf assuming the TUCP and 90% exceedance hydrology. A release of an additional 192 taf from New Melones (the April – May volume) would take that storage down to 223 taf. By comparison, the end-of

September storage in 2015 was 267 taf. An additional release of 107 taf in June would take the reservoir down to 116 taf.

Since the termination of the San Joaquin River Agreement and VAMP, the operators on the Tuolumne and the Merced are not compelled to augment spring flows beyond their current FERC requirements, which are minimal this spring after several critically dry years.

Given the lack of options, Reclamation believes that the TUCP reasonably balances the use of the limited New Melones supplies to provide fishery flows on the San Joaquin River this spring while maintaining storage to protect Stanislaus river temperatures and river flows later this year and next. This approach is similar to the dry-year operations envisioned by Reclamation when we prepared the Biological Opinion in 2008.

Based on our review of the record, the proposed flows appear to be within the range of Vernalis flows and Stanislaus releases evaluated during the 2008/2009 consultations, and the range of effects are within those previously analyzed. Reclamation believes that the operations to the TUCP this spring, in conjunction with the ongoing implementation of RPA actions from both Biological Opinions, will not adversely jeopardize any of the listed species, or result in adverse modification of critical habitat.

As outlined above, we believe that implementation of the TUCP this year is consistent with the Biological Opinions. To facilitate the SWRCB's review of Reclamation's TUCP, I am asking for your concurrence with our conclusion. Again, thank you for your continued assistance. If you have any questions, or need further clarification, please let me know.

Ron