

From: Wilcox, Carl@Wildlife

Sent: Monday, April 18, 2016 3:01 PM

To: Riddle, Diane@Waterboards; RMILLIGAN@usbr.gov; Rea, Maria@NOAA; Kaylee Allen

Cc: 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; Satkowski, Rich@Waterboards

Subject: RE: Request for Concurrence - March 2016 TUCP and consistency with the Biological Opinions

Ron and Diane,

The Department of Fish and Wildlife (DFW) has reviewed the Bureau of Reclamation's Temporary Urgency Change Petition (TUCP) submitted April 1, 2016 requesting adjustments to flow requirements at Vernalis in April, May and June and a reduction in the Ripon dissolved oxygen standard from 7 mg/l to 5mg/l through October 2016 which we now understand will not be part of the TUCP. DFW has also reviewed Reclamation's request for concurrence to the National Marine Fisheries Service (NMFS) dated April 12, 2016, requesting adjustment to the San Joaquin I:E ratio required by RPA IV.2.1, associated with a release of 75,000 acre-feet of water to the Stanislaus River to improve flow conditions for juvenile fall-run Chinook salmon and Steelhead migration, and NMFS's response dated April 14, 2016 concurring that adjustments to the San Joaquin I:E ratio as required in RPA IV.2.1, in conjunction with the augmented releases, are consistent with the findings of the 2009 *Biological Opinion and Conference Opinion on the Long-term Operations of the Central Valley Project and the State Water Project* for marine species including winter-run and spring-run Chinook salmon. In addition, CDFW staff participate in the Stanislaus Operations Group, which will provide technical assistance in the pattern and shaping of the spring pulse flow to provide the best biological benefit.

Given the current and projected storage condition at New Melones Reservoir, based on the volumes provided by Reclamation, DFW concurs that steelhead and fall-run salmon 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. We also support the request for adjustment to the San Joaquin I:E ratio associated with an additional release of 75,000 acre-feet of water during the Vernalis pulse period to allow that water to be subsequently diverted for use south of the Delta. We believe this action has a net benefit to fall-run salmon and steelhead by conserving water for cold water pool management and subsequent fall pulse flow.

In its request for concurrence to NMFS and associated request to the Fish and Wildlife Service, Reclamation determined that implementation of the TUCP is consistent with the 2008 Delta Smelt Biological Opinion and that the range of effects are within those previously analyzed. Reclamation also indicated that operations will be subject to ongoing implementation of RPA Action 3 which is designed to protect larval/juvenile Delta Smelt from entrainment to the facilities. At this time, the Service's March 25 determination that OMR flow should be no more negative than -2500 cfs remains in place. Action 3 will continue until offramp criteria are met (June 30th, or when the daily average water temperature at Clifton Court Forebay reaches 25 degrees C for three days, whichever occurs first)

Given Reclamation's determination that the range of effects are within those previously analyzed, and that there will be no modification to implementation of Action 3, the Service does not anticipate additional adverse effects to Delta Smelt or its critical habitat. DFW agrees with those findings.

The Smelt Working Group meet on April 18, 2016 and reviewed information on the distribution and risk to Longfin Smelt from current operations. Based on this information and the recent high outflows experienced over recent weeks, Longfin Smelt are located primarily downstream from the Sacramento San Joaquin River

confluence and the risk of entrainment under the proposed operations are low and are not likely to be adversely effected.

If you have questions, please contact me at (707) 944-5584 or by email at carl.wilcox@wildlife.ca.gov.

From: Riddle, Diane@Waterboards
Sent: Friday, April 15, 2016 10:30 AM
To: RMILLIGAN@usbr.gov; Rea, Maria@NOAA; Kaylee Allen
Cc: 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; Satkowski, Rich@Waterboards
Subject: RE: Request for Concurrence - March 2016 TUCP and consistency with the Biological Opinions

The State Water Board would also appreciate any input DFW has.

Thanks,
Diane

From: Milligan, Ronald [<mailto:rmilligan@usbr.gov>]
Sent: Friday, April 15, 2016 7:48 AM
To: Rea, Maria@NOAA; Kaylee Allen
Cc: 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: Request for Concurrence - March 2016 TUCP and consistency with the Biological Opinions

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