State Water Resources Control Board

March 07, 2022

Kristin White
Operations Manager
Central Valley Operations Office
United States Bureau of Reclamation
via email to knwhite@usbr.gov

Dear Ms. White,

WATER RIGHTS DECISION 1641 SAN JOAQUIN AND STANISLAUS RIVER FLOWS

This letter addresses the United States Bureau of Reclamation's (Reclamation) flow scheduling plans for the lower San Joaquin and Stanislaus rivers in water year 2022 and subsequent years prior to implementation of the Lower San Joaquin River flow objectives in the 2018 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta (Bay-Delta Plan).

State Water Board flow requirements for the San Joaquin River watershed are in the process of transitioning from fixed flow objectives based on water year type included in State Water Board Decision 1641 (D-1641) to the current Lower San Joaquin River minimum baseflow and tributary flow objectives in Table 3 of the 2018 Bay-Delta Plan. The 2018 tributary flow objective is expressed as a percent of unimpaired flow that varies based on tributary specific hydrology (precipitation and runoff in that watershed) and includes adaptive implementation provisions that apply to the Stanislaus, Tuolumne, and Merced rivers to achieve reasonable protection for fish and wildlife beneficial uses with contributions from all three salmon bearing tributaries.

The Board recognizes that it and Reclamation have maintained different positions regarding Reclamation's responsibility for meeting San Joaquin River flow objectives for fish and wildlife. The Board maintains that Reclamation is required to meet D-1641 requirements. However, the Board also recognizes the desirability of working collaboratively on flow management options for the Stanislaus and lower San Joaquin rivers to improve protection for San Joaquin River salmon consistent with the scientific basis supporting the Lower San Joaquin River flow objectives in the 2018 Bay-Delta Plan.

Prior to implementing the updated 2018 Bay-Delta Plan (including flows during the February through June time period and consideration of updated implementation of October flows), the State Water Board is interested in working with Reclamation to agree on New Melones operations. From the Board's perspective, it would be more productive and beneficial to develop a flow schedule that is consistent with the new and existing flow objectives, as opposed to seeking to enforce San Joaquin River D-1641 flow requirements. The Board proposes to exercise its discretion not to enforce the D-1641 San Joaquin River flow requirements, provided that Reclamation develops and implements an agreed upon alternative flow schedule pending implementation of the 2018 Bay-Delta Plan.

Such a flow schedule should improve flow conditions for salmon, including variable daily flows and a spring snowmelt pulse, and should be agreeable to the fisheries agencies. At a minimum, operations should avoid a flow depression during the spring pulse flow period, which could occur with the recent operational approach, as shown in Figure 1 and the flow volume should be equal to or greater than either the base flow requirement in D-1641 applied from February through June (including during the April and May time period) or 40 percent of unimpaired Stanislaus River flow with maintenance of the San Joaquin River baseflow (800 – 1,200 cfs) objective and the D-1641 salinity (electrical conductivity (EC)) requirement at Vernalis. These options are expected to provide a better flow pattern for Stanislaus River salmon and steelhead populations if shaped appropriately with input from fisheries agencies at minimal to no water supply cost (Tables 1 and 2) to New Melones relative to the flow pattern produced by operating to meet D-1641 salinity and baseflows and substituting the 2019 BiOp flows during the spring pulse flow period (and far less water than implementing D-1641 requirements during the pulse flow period).

Recently, fish agency participants in the Stanislaus Watershed Team suggested shaping Stanislaus River flows in water year 2022 to meet San Joaquin River base flow requirements in D-1641 and Stanislaus River flow requirements in the 2019 BiOp. The suggested flow shaping includes a release pattern that introduces flow variability and floodplain inundation which is associated with improved survival of juvenile salmonids on the Stanislaus River. The proposed variable flow shaping also provides conditions in which steelhead monitoring and special studies could be conducted. The suggested flow variability may not achieve the minimum daily flow requirement in D-1641 (Table 3, footnote 12) however the proposed flow variability is consistent with the scientific basis supporting variable flows that would occur with implementation of the 2018 Bay-Delta Plan Lower San Joaquin River tributary flow objective. The tributary flow objective produces greater flow variability than the fixed (flat) flow objectives in D-1641 and the default flow schedules in the 2019 BiOp, as shown in Figure 1.

Interagency coordination is increasingly important as the regulatory requirements for river flows and the long-term operations of the Central Valley Project and State Water Project are anticipated to change pending the outcomes of multiple processes including implementation of 2018 Bay-Delta Plan. We look forward to working together with Reclamation cooperatively on implementing the 2018 San Joaquin River flow objectives as expeditiously as possible.

I look forward to coordinating further with you on this matter in the coming months. If you have any questions, please contact Diane Riddle at Diane.Riddle@Waterboards.ca.gov.

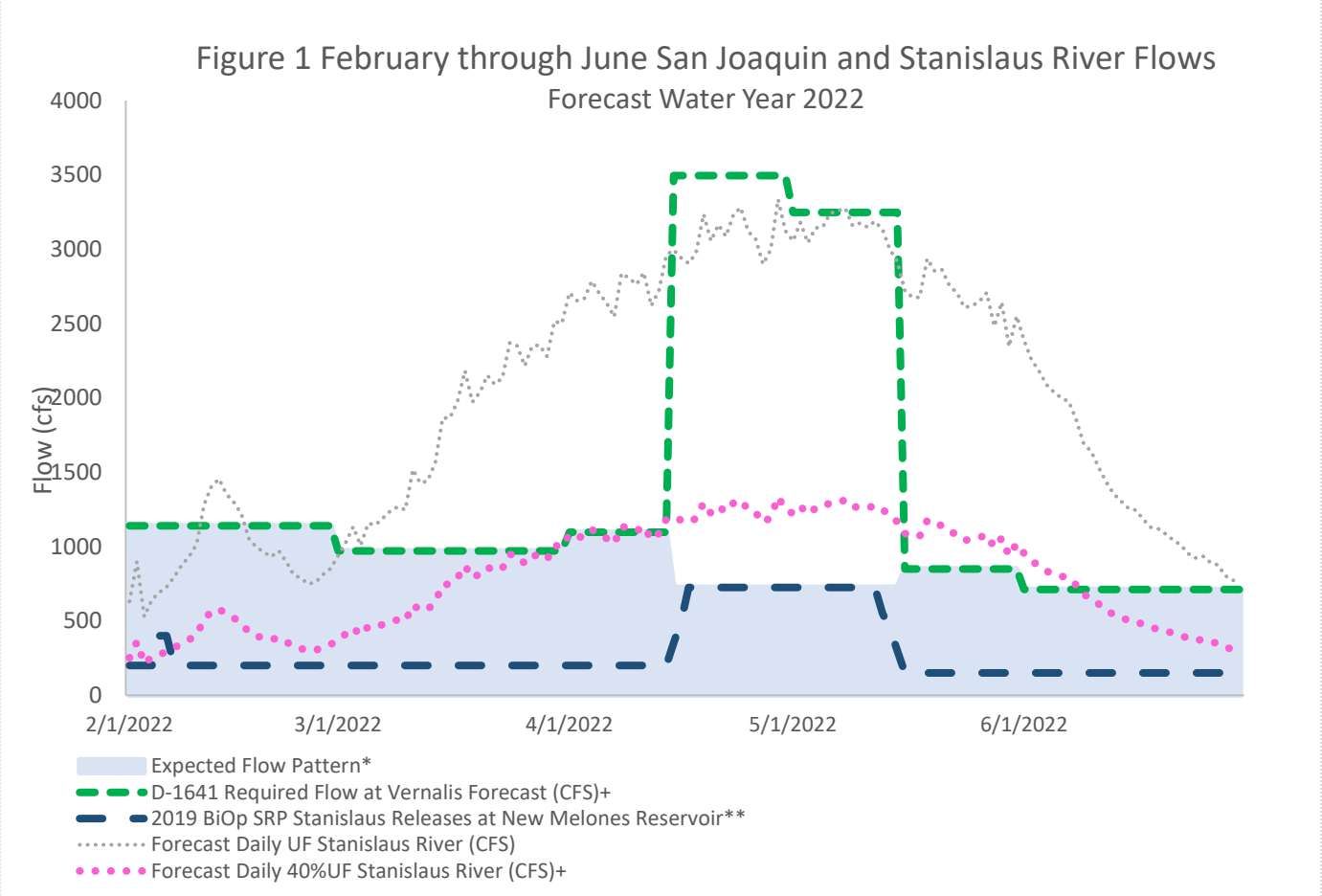
Sincerely,

Eileen Sobeck
Executive Director

cc:

bc:

xdate
document1
ECM#



* Expected flow pattern is based on New Melones operations in recent years that target achieving D-1641 San Joaquin River "base flows" at Vernalis from February 1 – April 14, the 2019 BiOp spring pulse flow from April 15 – May 15 on the Stanislaus River, and D-1641 base flows at Vernalis from May 15 – June 30. Actual flow rates on the Stanislaus and San Joaquin rivers would differ due to potential movement of pulse flow period and system accretions and depletions on the Stanislaus and San Joaquin Rivers.
+ D-1641 required flows were estimated using monthly flow volume from California Data Exchange Center (CDEC) and February 2022 Bulletin 120 and California Nevada River Forecast Center (CNRFC) monthly unimpaired flow forecast (75% exceedance). Full and 40 percent unimpaired daily flows from February 1 to 15 are calculated daily FNF values at Goodwin posted on CDEC and February 16 through June 30 flows were estimated using CNRFC daily unimpaired flow forecast (75% exceedance). Data were obtained from https://www.cnrfc.noaa.gov/index.php?product=ensPoints&zoom=9&lat=37.479&lng=-120.736 and https://cdec.water.ca.gov/snow/bulletin120/index2.html.
** New Melones Stepped Release Plan daily hydrographs in Appendix F of the 2019 BiOp.

Table 1 Water Volume associated with WY2022 Operational Strategies

February through June Operational Strategy	Total Volume (thousand acre-feet)
D-1641 Required Flow at Vernalis	412
D-1641 Monthly Base Flows at Vernalis	265
Expected Flow Pattern – D-1641 + BiOp for spring pulse flow	267
Daily 40%UF Stanislaus River*	180
2019 BiOp SRP Stanislaus Releases at New Melones	85

*Estimates do not include potential for additional water to meet minimum baseflow at Vernalis (1,000 cfs February – June (800 – 1,200 cfs range)) or EC at Vernalis.

Table 2 Water Volume associated with Operational Strategies 2020 - 2022

Water Year	Water Year Type	Flow Volume (thousand acre-feet) February – June Operational Strategies		
		D-1641 Required Flow at Vernalis	Expected New Melones Operations for Flow	Stanislaus River 40% Unimpaired Flow*
2020	D	552	388	211
2021	C	369	219	112
2022**	C	412	265	180

*Estimates do not include potential for additional water to meet minimum baseflow at Vernalis (1,000 cfs, February – June (800 – 1,200 cfs range)) or EC at Vernalis.
**2022 values are estimates using monthly flow volume from CDEC and February 2022 Bulletin 120 and monthly and daily flow forecasts from CNRFC. Forecast values are updated regularly and are subject to change as the water year progresses. Data obtained from https://www.cnrfc.noaa.gov/index.php?product=ensPoints&zoom=9&lat=37.479&lng=-120.736 and https://cdec.water.ca.gov/snow/bulletin120/index2.html.