Restoration Administrator Flow Recommendation

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Date:	February 5, 2016
From:	Tom Johnson, Restoration Administrator
Subject:	Recommendations for February 2016 Restoration Flows

The following is a recommendation by the Restoration Administrator (RA) for February 2016 Restoration Flows, pursuant to the December 2013 Restoration Flow Guidelines (RFG) and Exhibit B of the Settlement.

Background

I am in receipt of the Restoration Allocation dated January 29, 2016 which provides an allocation of Restoration Flows of 9,445 acre-feet for the month of February, as measured at Gravelly Ford. The Allocation also specifies certain contractual and operational constraints on flow releases for February of 2016. Hopefully we will all have additional clarity with regards to the water supply situation in the San Joaquin watershed and throughout the CVP service area after the next round of snow surveys in early February.

Additional Considerations

In addition to receiving the Allocation and analyzing hydrologic conditions and forecasts, I have consulted with the Technical Advisory Committee (TAC), the resource agencies, Reclamation, and the Settling Parties with regards to potential recommendations, operational and biological implications, and water supply impacts. Several key considerations factored in the Restoration Flow recommendation.

In general, the focus of this year's Restoration Flow releases will be twofold:

- 1. Taking a fundamental step towards implementation of the Settlement by commencing yearround connectivity of the river from Friant Dam to the Merced River confluence.
- 2. Facilitate outmigration of juveniles and to further refine techniques and methods for juvenile trapping in Reach 1.

In addition to being a requirement of the Settlement, reconnecting the river will allow an extensive monitoring effort, including better information on flow losses, water temperature changes, flow attenuation, channel response, riparian recruitment, and native fish recruitment. As the flow and seepage easements are secured to allow flow continuity and hydrologic conditions become more certain, connecting the river through the balance of the Restoration Year will be a major focus of Restoration Flow planning.

Restoration Flows will be managed to support juvenile trapping efforts in Reach 1. 2015 was the most successful adult trap and haul effort to date, yielding the highest number of adults transported and

redds constructed since the start of the Program. This season's juvenile trapping efforts will advance the restoration of salmon to the river consistent with the Settlement Agreement and refine collection techniques for future use to further build populations in early Program years and as a fallback in drier water year types. Restoration Flows will be staged to facilitate:

- 1. Installation and testing of juvenile trap structures under low flow conditions;
- 2. Slight increases in flows during early emergence periods, and
- 3. Increasing flows during the peak of emergence and juvenile movement, along with testing of low pulse flows to encourage juvenile movement and capture.

The February Allocation specifies Restoration Flow volumes available at Gravelly Ford; consequently this Recommendation specifies flow levels at Gravelly Ford for the balance of the month of February. I assume Reclamation will vary actual Friant Dam releases as necessary to meet these Gravelly Ford Restoration Flow Targets, as well as Holding Contract and other flow management obligations.

Recommendation

The RA is recommending the following for the month of February 2016:

- On February 15, increase flows from Friant Dam above Holding Contract releases as necessary with the target of providing 80 cfs at Gravelly Ford. Based on Exhibit B flow loss assumptions in Reach 2A, no Restoration Flows will be entering Mendota Pool.
- As soon as minimum flowage easements are secured and other operational or contractual constraints are relieved to allow releases below Sack Dam:
 - Immediately increase flows from Friant Dam above Holding Contract releases as necessary with the target of providing 130 cfs of Restoration Flows at Gravelly Ford.
 - Upon inflow of Restoration Flows from the San Joaquin River to Mendota Pool, release an equivalent amount of Restoration Flows below Sack Dam. Adjust releases at Sack Dam to be equivalent to the inflow from the San Joaquin River to Mendota Pool or 50 cfs, whichever is less.

Depending on the timing of releases below Sack Dam, this Flow Recommendation is anticipated to utilize between 2,380 and 3,867 ac-ft.

Additional Consultation

I will continue to coordinate with the TAC, Program Office, and technical study leads to monitor release conditions, data collection conditions, juvenile trapping progress and other factors. I look forward to Reclamation's expansion of the Allocation on or around February 20, and will be prepared to provide additional Restoration Flow recommendations at that time.