

Restoration Administrator Flow Recommendation

To: Ali Forsythe, Chad Moore, Emily Thomas, Elizabeth Vasquez
CC: Michael Jackson, Jerry Herman, Rufino Gonzalez, Ed Salazar, Doug Obegi, Steve Ottemoeller, Jeff Payne, TAC
Date: July 21, 2017
From: Tom Johnson, Restoration Administrator
Subject: Updated Recommendations for 2017 Restoration Flows

The following is an updated recommendation by the Restoration Administrator (RA) for 2017 Restoration Flows.

Background

I am in receipt of Reclamation's July 10, 2017 Final Restoration Allocation and Default Flow Schedule. Flood control releases into the San Joaquin River commenced in January; Reclamation has reduced flood control releases from Friant Dam over the past few weeks in anticipation of the end of flood control releases and resumption of Restoration Flows. This updated Recommendation responds to both the Final Restoration Allocation and the impending cessation of flood control releases.

Additional Considerations

The focus of this year's Restoration Flow releases continue to be:

1. Continuing year-round connectivity of the river from Friant Dam to the Merced River confluence;
2. Maximizing Restoration Flow releases as necessary to achieve Restoration Goal, within flow constraint limitations, limited only by the limiting flow constraint between Friant Dam and the Merced River;
3. Continuing to refine coordination and operations of the Restoration Program in conjunction with operations on the San Joaquin River.

This updated Recommendation assumes Reach 1 Riparian Releases/Holding Contract demands in accordance with the Exhibit B Wet year type flow schedule. However, it is possible that the net loss in Reach 1 from Riparian Releases/Holding Contract demands may be less than the Exhibit B amounts for a period of days or weeks after the transition from flood control releases to Restoration Flows.

This updated Recommendation assumes a loss of 80 cfs from Gravelly Ford (GRF) to Mendota Pool, and a 5% loss through Mendota Pool to Sack Dam. However, it is possible that losses may differ from these anticipated losses for a period of days or weeks after the transition from flood control releases to Restoration Flows.

Recommendation

Restoration Flow recommendations will continue to be updated in response to flood control releases, operational constraints and other changing conditions.

At this time, I am recommending the following Restoration Flows for the balance of 2017, although I anticipate making a more refined Flow Recommendation for fall pulse flows at a later time:

- The best current flood control release schedule for Friant Dam calls for releases to the river through at least July 21, 2017 to accomplish management of reservoir inflows and evacuation of flood space.
- From July 21, 2017 through February 28, 2018, target the Exhibit B Friant Dam release and GRF flows (and associated Sack Dam flows) for a Wet water year type:

<i>Date Range</i>	<i>Friant Dam Minimum Release</i>	<i>GRF Flow Target</i>	<i>Sack Dam Target (Not Less Than)</i>
July 1 – Aug 31	350 cfs	125 cfs	43 cfs
Sept 1 – Sept 30	350 cfs	145 cfs	62 cfs
Oct 1 – Oct 31	350 cfs	195 cfs	109 cfs
Nov 1 – Nov 10	700 cfs	575 cfs	451 cfs
Nov 11 – Dec 31	350 cfs	235 cfs	147 cfs
Jan 1 – Feb 28	350 cfs	255 cfs	166 cfs

- Flow releases, targets and measurement protocols shall be in conformance with the Restoration Flow Guidelines.
- In the event that the net losses in Reach 1 from Riparian Releases/Holding Contract demands may be less than the Exhibit B amounts for a period of days or weeks after the transition from flood control releases to Restoration Flows, any additional flow that arrives at GRF above the target will be released past GRF.
- In the event that losses between GRF and Sack Dam are less than anticipated for a period of days or weeks after the transition from flood control releases to Restoration Flows, any additional flow that arrives at Sack Dam above the target will be released past Sack Dam.
- Reclamation will perform flow bench evaluations at locations and at times appropriate to monitor potential seepage impacts, and will inform me and river operators as to any flow limitations associated with seepage concerns.
- If Restoration Flow seepage limitations are imposed, then Restoration Flows will be reduced (if seepage limitations are upstream of Mendota Pool, or Restoration Flows will be recaptured at Mendota Pool (if seepage limitations are downstream of Mendota Pool).
- I will work closely with Reclamation and river operators to adjust Restoration Flows as needed, anticipating adjustments in Restoration Flow releases due to seepage constraints and variations in seepage losses as a result of groundwater levels. Flow releases from Friant Dam will be adjusted up or down as needed to achieve targets at GRF and Sack Dam.

- I will potentially revise the Fall Pulse Flow release later in the summer after observing Delta and Lower San Joaquin River conditions, and consulting with TAC and Program fisheries biologists.
- In the event that flow bench evaluations dictate that seepage impacts are of concern, Restoration Flows may be revised downward.

Additional Consultation

I will continue to coordinate with the TAC, Program Office, and technical study leads to monitor hydrologic conditions, fishery conditions, flood control releases, operational conditions, and other factors.