

Restoration Administrator Flow Recommendation

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

The following is an updated recommendation by the Restoration Administrator (RA) for 2017 Restoration Flows, pursuant to the December 2013 Restoration Flow Guidelines (RFG), as amended, and Exhibit B of the Settlement.

Background

I am in receipt of the Restoration Flow Allocation (Allocation) dated March 14, 2017 which provides an allocation of Restoration Flows of 556,542 acre-feet for 2017, as measured at Gravelly Ford. The Restoration Flow volume in this Allocation has not changed from the January 20 Allocation, nor is it anticipated to change for the balance of the Restoration Year given the forecasted runoff volume of the snowpack.

The Allocation also specifies certain contractual and operational constraints on flow releases for 2017.

Additional Considerations

Flood control releases into the San Joaquin River commenced in January, and are expected to extend through at least late June. As a result, the 410 cfs of recommended Restoration Flows at GRF (pursuant to the January Flow Recommendation) are included in the flood control release, but flood control releases are much higher than the Restoration Flow specification.

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.

Recommendation

Restoration Flow recommendations will continue to be updated in response to subsequent Allocations, flood control releases, and other changing conditions. At this time, I am recommending the following Restoration Flows for 2017:

- The best anticipated flood control release schedule for Friant Dam calls for releases to the river until at least late June to accomplish management of reservoir inflows and evacuation of flood space.
- If for some reason flood control releases cease prior to the end of June, target 415 cfs (410 cfs of Restoration Flows) at Gravelly Ford, which should yield 300 cfs of Restoration Flows at Sack Dam. This assumes Exhibit B riparian contract demands in Reach 1 and seepage losses in Reach 2, and a negotiated 5% loss rate through the Mendota Pool complex. Maintain these target flow levels through June 30, 2017.
- From July 1, 2017 through February 28, 2018, target the Exhibit B GRF flows for a Wet water year type:
 - 125 cfs- July 1 – Aug 31
 - 145 cfs- Sept 1 – Sept 30
 - 195 cfs- Oct 1 – Oct 31
 - 575 cfs- Nov 1 – Nov 10
 - 235 cfs- Nov 11 – Dec 31
 - 255 cfs- Jan 1 – Feb 28
- 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 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 additional seepage easements are acquired in a timely manner, Restoration Flows prior to June 30 may be revised upward.
- In the event that flow bench evaluations dictate that seepage impacts are of concern, Restoration Flows prior to June 30 may be revised downward.
- The January 31 Restoration Flow recommendation produced over 350,000 acre-feet of URF's, of which 250,000 acre-feet of URF's were released and largely disposed of by Reclamation. Of the balance of URF's as of April 21, 2017 (approximately 100,000 acre-feet), an additional 65,000 acre-feet are recommended to be released immediately for disposition as soon as practical through sale by Reclamation.
- The balance of URF's as of this Recommendation (approximately 35,000 acre-feet) are withheld at this time in the event (a) there is a change in the Allocation, (b) hydrologic conditions turn dry, (c) increased channel capacity from the timely securing of additional seepage easements allows increased flow conveyance, or other factors.
- It is anticipated that a third block of URF's may need to be allocated and released in a timely manner to reduce the risk of their spilling as part of flood control releases; the intent at this time is to allocate all URF's, other than minor URF withholding to account for changing conditions, prior to June 30, 2017.

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. I look forward to Reclamation's additional Restoration Flow allocations, and managing the anticipated high runoff situation.