Restoration Administrator Flow Recommendation

To: Mario Manzo, Chad Moore, Katrina Harrison, Emily Thomas
CC: Michael Jackson, Rufino Gonzalez, Lui Zaninovich, Peter Vorster, Steve Ottemoeller, TAC
Date: February 26, 2016
From: Tom Johnson, Restoration Administrator
Subject: Recommendations for March 2016 Restoration Flows

The following is a recommendation by the Restoration Administrator (RA) for March 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 Provisional Restoration Allocation dated February 22, 2016 which continues the allocation of Restoration Flows of 9,445 ac-ft, as measured at Gravelly Ford. Based on current Restoration Flow releases pursuant to the January 29, 2016 Restoration Flow Recommendation, the remaining Restoration Flow volume available as of March 1 is anticipated to be 7,065 ac-ft.

I am also aware of the contractual and Delta supply issues that may result in the need to provide Exchange Contract supplies from Millerton Lake. While it is possible that these conditions are directly related to the past few years of drought conditions and are thus anomalous, it is also possible that this is not a unique situation and that Exchange Contractor demands on Millerton Lake will be a more frequent occurrence.

On-going uncertainty regarding allocation of Restoration Flows this year is problematic but so far not catastrophic. At this juncture, the fisheries if not flow objectives for this year are being met with the limited flows being allocated to the river; the need for greater flows is tempered by limited river connectivity and capacity. Furthermore, juvenile salmonid collection efforts are not negatively impacted by maintaining flows at moderate level for the next few months. However, should forecast uncertainty preclude a Restoration Flow allocation in April and May, the impact to the Restoration Goal objectives to restore flows and connectivity to the river will be significantly impacted.

Achieving the Restoration Goal will require a better degree of certainty of the availability of Restoration Flows in order to successfully implement the SJR Restoration Program in accordance with the Settlement and the legislation. In particular, the needs of anadromous salmonids will be best supported by flows that can be accessed early in the calendar year (relative to irrigation flows). A minimal or deferred Allocation until late March, with only minimal ability to release Restoration Flows prior to April 1, will severely constrain the ability of the SJR Restoration Program to achieve the Restoration Goal.

The Final Restoration Flow Guidelines (RFG's) as promulgated by Reclamation in December of 2013 do not provide any guidance with regards to the Allocation process in the face of Delta operational uncertainty; as a result Reclamation has not been adhering to the RFG's (either target dates or protocols for developing an Allocation). Separate from this Flow Recommendation, I will consult with the Program

and stakeholders to discuss potential modifications to either RFG's or other operations that may provide additional tools to alleviate Restoration Flow allocation uncertainty for the SJRRP.

Additional for Restoration Flow Releases

From the January 29 Restoration Flow Recommendation, the focus of this year's Restoration Flow releases were identified as:

1. Taking a fundamental step towards implementation of the Settlement by commencing year-round 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.

Given the persistent uncertainties with regards to future allocations and potential Exchange Contractor releases, the ability to shape releases to meet this year's priorities is limited. In particular:

1. The absence of any indication as to the timing of a Restoration Flow allocation impedes the ability to plan and manage flows.
2. In the absence of a date certain or flow rate for any Exchange Contractor releases, there is not an ability to coordinate with any such releases.

As a result, this recommendation is focused on continuing to facilitate outmigration of juveniles and to further refine techniques and methods for juvenile trapping in Reach 1.

This Recommendation specifies flow levels at Gravelly Ford for the month of March. I assume Reclamation will continue to 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 March 2016:

- Continue to release 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.
- Continue to monitor the rivers end, to monitor the progress of surface flows towards Mendota Pool.
- I will recommend one or two pulses, of two to four days duration, of an additional 100 to 150 cfs above the release necessary to achieve 80 cfs at Gravelly Ford to facilitate juvenile outmigration and trapping tests. I will work directly with the Program Office and Friant Operations to coordinate the timing and duration of those pulses; in any event, no pulses will be scheduled prior to March 14.
- Any Restoration Flows that reach Mendota Pool can be recaptured there.

Depending on the number, magnitude and duration pulses, this Flow Recommendation is anticipated to utilize between 4,920 and 7,000 ac-ft of the remaining 7,065 ac-ft of Provisional Restoration Flow Allocation.

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 Restoration Flow Allocation on or around March 20, and will be prepared to provide additional Restoration Flow recommendations at that time.