# **Restoration Administrator Flow Recommendation**

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	TAC				
Date:	June 2, 2020				
From:	Tom Johnson, Restoration Administrator				
Subject:	Updated Recommendation for 2020 Restoration Flows				

The following is an updated Flow Recommendation by the Restoration Administrator (RA) for remaining 2020 Restoration Flows pursuant to the January 2020 Restoration Flow Guidelines (RFG), as amended, and Exhibit B of the Settlement.

### **Background**

The current approved Restoration Flow Recommendation (Recommendation) for 2020 is dated April 28, 2020 based on the Restoration Allocation (Allocation) from Reclamation dated April 14, 2020. An updated Allocation dated May 17, 2020 designates 2020 currently as a **Dry** Water Year Type with an Unimpaired Inflow hybrid forecast of 880 thousand acre-feet (TAF), and a current allocation of Restoration Flows of 202.197 TAF as measured at Gravelly Ford (GRF), down from the April 14 Allocation of 211.123 TAF at GRF. The Allocation also specifies certain contractual and operational constraints on Restoration Flow releases for 2020. This is the final allocation for the Restoration flow volume for the spring flow account.

### **Additional Considerations**

At this juncture, the focus of the Restoration Flow release will be to maintain river connectivity, maintain the Millerton Reservoir cold pool for use during the key spawning and incubation months of September through November, and maintain acceptable in-river temperatures for adult spring-run Chinook salmon holding and spawning in Reach 1A from June – November. Since these objectives may place conflicting demands on flow releases, an element of adaptive management (primarily adjustments to river releases in response to weather and water temperature signals) may be required for the next 6 months.

The Fall Pulse may be helpful in maintaining cold river temperatures in October and November or may be pushed to February as per the last two years to provide early spring-run Chinook juvenile/smolt outmigration pulses. Accordingly, this Recommendation shows 2,500 AF in November 2020 and 2,500 AF in February 2021.

As was the case earlier this year, key current seepage constraints that limit flows in the river channel include a limit of 850 cfs in Reach 3 (inclusive of both Restoration Flows and deliveries to Henry Miller Reclamation District), and an estimated total flow limit of about 290 cfs in Reach 4A.

## **Recommendation for the Balance of Restoration Year 2020**

At this time, I am recommending an updated flow schedule for the balance of the year as shown in **Table 1** (changes from the April 28 Recommendation are in red).

With the current Allocation, this Recommendation produces approximately 52 TAF of Unreleased Restoration Flows (URF's, actual amount depending on current accounting of Restoration Flow releases to date), of which 40 TAF have been released for sale to date. **Of the remaining 12 TAF, I am recommending the immediate release of 5.6 TAF of URF's for disposition by the Program.** I will continue to hold back the remaining URF's from sale until at least the June Allocation in the event of drier conditions or the need for additional water for temperature management.

Additional modifications to the fall pulse may be forthcoming later in the summer depending on fish and water temperature conditions.

Date Range	Friant Release	Buffer Flow Release	Restoration Flows at Gravelly Ford	Total Flow at Gravelly Ford*	Target Flow at Sack Dam
May 29 through June 30, 2020	As necessary but not less than 350 cfs	0 cfs	160 cfs	165 cfs	71 cfs
July 1 through July 31, 2020	As necessary	0 cfs	170 cfs	175 cfs	81 cfs
August 1 through August 31, 2020	As necessary	0 cfs	175 cfs	180 cfs	86 cfs
September 1 through September 30, 2020	As necessary	0 cfs	185 cfs	190 cfs	95 cfs
October 1 through October 31, 2020	As necessary	0 cfs	195 cfs	200 cfs	105 cfs
November 1 through November 22, 2020	As necessary, est. at 430 cfs	0 cfs	310 cfs	315 cfs	214 cfs
November 23 through December 31, 2020	Minimum of 350 cfs	0 cfs	230 cfs	235 cfs	138 cfs
January 1, 2021 through February 6, 2021	Minimum of 350 cfs	0 cfs	250 cfs	255 cfs	157 cfs
February 7 through February 28, 2021	As necessary, est. at 430 cfs	0 cfs	330 cfs	335 cfs	233 cfs

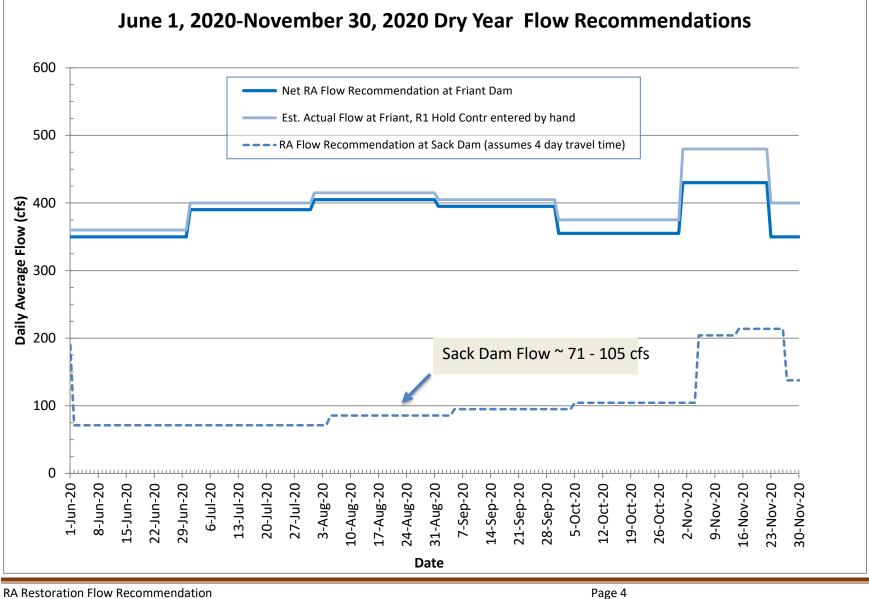
Table 1. Summary of Restoration Flow Recommendations for April 16, 2020 through February 28, 2021.

\*Total Flow includes the minimum Holding Contract flows of 5 cfs required at Gravelly Ford

Figure 1 below shows the anticipated Flow Recommendation for this year at key locations in the Restoration Area.

### **Additional Consultation**

I will continue to coordinate with the TAC, Program Office, and Implementing Agencies to monitor hydrologic conditions, fish population conditions, uncontrolled season releases, operational conditions, and other factors, and will update the Restoration Flow Recommendation as conditions change.



RA Restoration Flow Recommendation June 2, 2020