

Restoration Administrator Flow Recommendation

To: Don Portz, Chad Moore, David van Rijin, Regina Story
CC: Michael Jackson, Rufino Gonzalez, Gary Bobker, Steve Ottemoeller, Ian Buck-Macleod, TAC, FWC
Date: February 29, 2024
From: Tom Johnson, Restoration Administrator
Subject: Updated Recommendation for 2024 Restoration Flows

The following is a Restoration Flow Recommendation (Recommendation) by the Restoration Administrator (RA) for the 2024 Restoration Year Flows pursuant to the Restoration Flow Guidelines (RFG) Ver. 2.1, as amended, and Exhibit B of the Settlement.

Background

The SJRRP has issued an Updated 2024 Restoration Allocation (Allocation) dated February 16, 2024, which designates 2024 as a **Normal-Wet** Water Year Type with an Unimpaired Inflow hybrid forecast of 1,479 thousand acre-feet (TAF) and provides an allocation of Restoration Flows of 287.418 TAF as measured at Gravelly Ford (GRF) based on the 75% exceedance forecast. The Allocation also specified certain contractual and operational constraints on Restoration Flow releases for 2024.

Recommendation for 2024 Restoration Year

At this time, I am recommending a flow schedule for the 2024 Restoration Year as shown in Table 1. This Recommendation:

1. Provides near-maximum flow to the river (limited by seepage constraints below Sack Dam) through April 24, then ramps down to enhanced summer base flow to protect cold pool in Millerton. This spring higher flow period may be extended if reservoir temperature conditions warrant.
2. Then utilizes shifted spring pulse flows through October 30, 2024 to maintain a connected river (targeting at least 50 cfs at EBM); after October 30 base flows will be greater than 70 cfs.
3. Resumes Exhibit B base flows from November 1, 2024, through February 28, 2025. Additionally, the fall pulse will likely be deployed in two parts in November and December to support a river science experiment.

This Recommendation is intended to a) release the maximum possible volume of Restoration Flows down the river, as limited by seepage and cold pool considerations and b) keep the river connected for the entirety of the year, although with reduced summertime flows to preserve cold pool to the extent possible. An initial block of URF's is also released.

No recapture other than de-minimus amounts are planned in the Restoration area. All Restoration Flow releases are to flow through the entirety of the Restoration Area. If there are operational or other constraints that preclude Restoration Flows traveling the entire length of the Restoration Area, the

Restoration Recommendation will be adjusted to reduce Restoration Flow releases to the level of the controlling operational constraint.

Table 1. Summary of Restoration Flow Recommend. for March 1, 2023, through February 28, 2024.

Restoration Flow Period	Date Range	Friant Release (est., varies due to Holding Contracts)	URF Exchange Release	Restoration Flows at Gravelly Ford	Total Flow at Gravelly Ford¹	Target Restoration Flow at Sack Dam (est.)²
2023 Spring Flex. Flow Period	March 1 – March 31, 2024 ³	As necessary, est. 545 – 585 cfs	0 cfs	395 cfs	400 cfs	315 cfs
	April 1 – April 24, 2024 ³	As necessary, est. 580 – 650 cfs	0 cfs	410 cfs	415 cfs	315 cfs
	April 25 – May 14, 2024 ³	Gradual ramp down, approx. 10 cfs/day avg	0 cfs	As occurs	As occurs	As occurs
	May 15 – May 28, 2024 ³	As necessary, est. 405 – 475 cfs	0 cfs	190 cfs	195 cfs	100 cfs
Base Flow + Shifted Spring Pulse	May 29 – June 30, 2024 ⁴	As necessary, est. 405 – 475 cfs	0 cfs	190 cfs	195 cfs	100 cfs
	July 1 – July 31, 2024	As necessary, est. 440 – 475 cfs	0 cfs	200 cfs	205 cfs	100 cfs
	August 1 – Sept. 30, 2024	As necessary, est. 440 – 475 cfs	0 cfs	200 cfs	205 cfs	100 cfs
	October 1 – October 31, 2024	As necessary, est. 410 – 475 cfs	0 cfs	200 cfs	205 cfs	110 cfs
Base Flows + Fall Pulse	November 1 – Dec. 31, 2023	As necessary, est. 410 – 475 cfs	0 cfs	230 cfs	235 cfs	125 to 140 cfs
	TBD, estimated Nov 13 and Dec 13, 2024	Two pulses of 650 cfs for 8 days	0 cfs	As occurs, up to 450 cfs	As occurs, up to 445 cfs	As occurs, up to 305 cfs
	January 1, 2024 – February 28, 2023	As necessary, est. 410 – 475 cfs	0 cfs	255 cfs	250 cfs	165 cfs

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

²Flows in the Eastside Bypass (EBM) should always remain above 50 cfs

³March 1 through May 28 flows are as per Flexible Flow period rules, see RFG 2.1, Sec 4.1.2

⁴Shift of Spring Pulse is per Exhibit B, 4(d), see RFG 2.1, Sec 4.1.5

⁵Shift of Fall Pulse is per Exhibit B, 4(d), see RFG 2.1, Sec 4.1.5

Additional Elements of this Recommendation

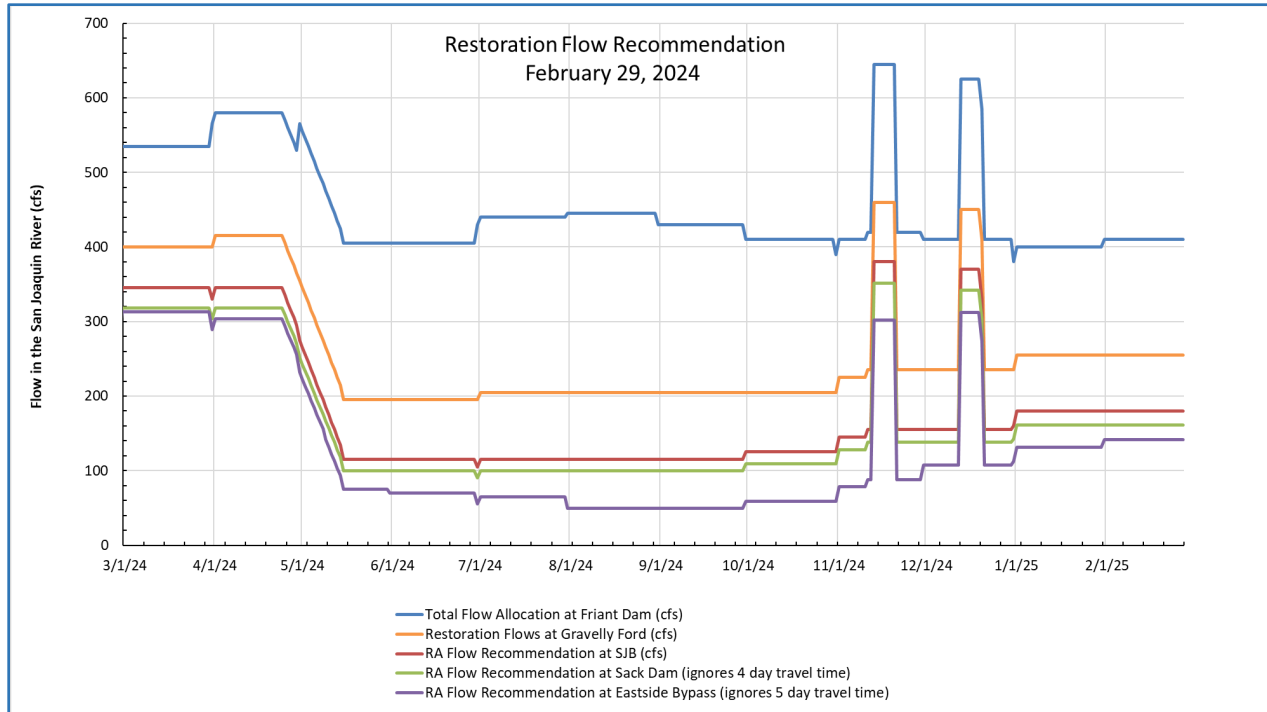
This Recommendation anticipates the release of 186.198 TAF of Restoration Flows to the river, leaving 101.219 TAF as Unreleased Restoration Flows (URF's). *Note that these volumes may change, depending on hydrologic and fishery conditions, future Allocations, and future Recommendations.*

Given the early season and potential for very different hydrological conditions in 30 or 60 days, **40 TAF of URF's (net to canals) are immediately released for disposition**. The balance of potential URF's is held to accommodate for changing hydrologic conditions, and to support an extended period of higher flow releases to the river if temperature conditions are suitable.

Depending on changing hydrologic conditions, I will adjust or revise this recommendation as necessary.

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.



GRAVELLY FORD FLOWS AVAILABLE VERSUS RA RECOMMENDATION		Available	Used	Balance
Total GRF River Flow Target without 5 cfs (March 1, 2024 - Feb 28, 2025):		287.418 TAF	186.198 TAF	101.219 TAF
Restoration Allocation Flow		287.418 TAF	186.198 TAF	101.219 TAF
Exchange Flow		0.000 TAF	0.000 TAF	0.000 TAF
Buffer Flows		0.000 TAF	0.000 TAF	0.000 TAF
		URF's Disposed of as of 2/29/2024		0.000
Use Buffer Flows? no		Net Alloc Remainder		101.219 TAF

ACCOUNTS SUMMARY at Gravelly Ford, this Restoration Year			
	Available	Used	Balance
Continuity (Baseflows):	136.443 TAF	136.443 TAF	0.00000 TAF
Spring Flexible Flows:	144.033 TAF	26.866 TAF	117.167 TAF
Fall Flexible Flows:	6.942 TAF	6.902 TAF	0.040 TAF
Riparian Recruitment Flows:	0.000 TAF	0.000 TAF	0.000 TAF
Extra Summer Flow (Water Supply Test):	0.000 TAF	15.987 TAF	15.987 TAF
Total:	287.418 TAF	186.198 TAF	101.220 TAF