Restoration Administrator Flow Recommendation

To: Don Portz, Chad Moore, David van Rijin, Regina Story

cc: Rain Emerson, Rufino Gonzalez, Gary Bobker, Steve Ottemoeller, Ian Buck-Macleod, TAC, FWC

Date: March 27, 2025

From: Tom Johnson, Restoration Administrator

Subject: Updated Recommendation for 2025 Restoration Flows

The following is a Restoration Flow Recommendation (Recommendation) by the Restoration Administrator (RA) for the 2025 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 2025 Restoration Allocation (Allocation) dated March 17, 2025, which designates 2025 as a **Normal-Dry** Water Year Type with an Unimpaired Inflow hybrid forecast of 1,191 thousand acre-feet (TAF) and provides an allocation of Restoration Flows of 248.489 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 2025.

The February 24, 2025, Recommendation was approved by Reclamation. Subsequently, Reclamation completed an additional seepage easement in Reach 4A, which allowed for higher Restoration Flow releases in March. Via Ad-Hoc Recommendation submitted on March 14, Restoration Flows were increased at Friant Dam and GRF starting on March 19. The approved March 14 Ad-Hoc Recommendation is attached to this Recommendation.

I have consulted with the TAC and the FMWG on this Recommendation, and this Recommendation reflects the best use of the Allocation of Restoration Flows for the fisheries resources at this time.

Recommendation for the 2025 Restoration Year

At this time, I am recommending a flow schedule for the 2025 Restoration Year as shown in Table 1, and as follows:

1. Provide a fairly high flow bench in March and early April to facilitate the release and subsequent escape of juvenile Chinook salmon from the Restoration Area. Tagged juvenile Chinook salmon releases from the iSCARF into Reach 5 were completed in March, and juveniles are still working their way out of the San Joaquin River system.
2. Maintain connectivity of the lower San Joaquin River below EBM until at least late May at a flow that will encourage adult spring-run Chinook salmon migration at least as far upstream as EBM. Hopefully, given a wetter water year and successful juvenile releases in 2023, adult spring-run Chinook salmon returns this year will be higher than the past couple of years.
3. Reduce Restoration Flows from the end of May through October to preserve cold-water pool in Millerton Reservoir to support adult spring-run Chinook salmon holding, spawning, and egg incubation.
4. No exchanges or buffer flows are called upon at this time.
5. Additionally, the fall pulse will likely be deployed in two parts in November and December to support a river science experiment at Chowchilla Bifurcation Structure.

Given the remaining uncertainty as to Restoration Year hydrology, I anticipate additional adjustments to this Recommendation in the coming months. In particular, should runoff or cold-water pool conditions dictate, further reductions in summer flows may be enacted to conserve cold-water pool until the beginning of adult spring-run Chinook salmon spawning and egg incubation season.

No Restoration Flow 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 Recommendations for March 27, 2025, through February 28, 2026.

Restoration Flow Period	Date Range	Objective	Friant Release (estimate varies due to Holding Contracts)	Restoration Flows at Gravelly Ford	Total Flow at Gravelly Ford[1]	Target Restoration Flow at Sack Dam (est.)
2025 Spring Flex. Flow Period[3]	March 27 to March 31, 2025	Juvenile release pulse, flow bench test at SDP	As necessary, estimated 1,035 cfs	820 cfs	825 cfs	700 cfs
	March 31 to April 29, 2025	Ramp down to steady-state May flow	Follow ramp down schedule as per Table 2. Program to coordinate with dam operations for daily changes.			
	April 29 to May 28, 2025	Steady-state May Spring Run attraction and trapping flow	Estimated 500 cfs	290 cfs	295 cfs	195 cfs
Summer Flow (Enhanced Base Flow)	May 29 to September 30, 2025	River connectivity	As necessary, estimated 410 cfs	180 cfs	185 cfs	90 cfs
Base Flow	October 1 to October 31, 2025	Spring run spawning and egg incubation	As necessary, estimated 400 cfs	190 cfs	195 cfs	100 cfs
Base Flow[2]	November 1 to November 30, 2025	Connected river, spring run egg incubation.	As necessary, estimated 420 cfs	230 cfs	235 cfs	135 cfs
	December 1 to December 31, 2025	Connected river, juvenile rearing	As necessary, estimated 440 cfs	285 cfs	290 cfs	190 cfs
Base Flow	January 1 to February 28, 2026	Connected river, juvenile rearing	As necessary, estimated 400 to 410 cfs	250 cfs	255 cfs	157 cfs

[1] Total Flow includes the minimum Holding Contract flows of 5 cfs required at Gravelly Ford
[2] Fall Pulse Flow may be added during this period to support a river science experiment at Chowchilla Bifurcation Structure

Table 2. April Ramp Down, March 31, 2025, through April 29, 2025. Includes Changes at Friant Dam and Assumed Transit Times to GRF and SDP.

Draft Spring 2025 Ramp-down Plan (3/27 update)						
Date	Day	Friant Dam Change (cfs)	Friant Dam Change Time	GRF Flow, with Transit Time (cfs)	SJB Flow, with Transit Time (cfs)	Sack Dam Flow, with Transit Time (cfs)
30-Mar	Sun	–	–	845	755	700
31-Mar	Mon	-50	p.m.	845	745	700
1-Apr	Tues	-50	a.m. or p.m.	845	745	700
2-Apr	Wed	-50	a.m. or p.m.	845	745	700
3-Apr	Thur	-50	a.m. or p.m.	795	745	700
4-Apr	Fri	-50	a.m. or p.m.	745	695	700
5-Apr	Sat	-50	a.m.	695	645	650
6-Apr	Sun	–	–	645	595	605
7-Apr	Mon	–	–	595	545	555
8-Apr	Tues	-50	a.m.	545	495	510
9-Apr	Wed	–	–	545	445	460
10-Apr	Thur	–	–	545	445	415
11-Apr	Fri	-50	a.m.	495	445	415
12-Apr	Sat	–	–	495	405	415
13-Apr	Sun	–	–	495	405	375
14-Apr	Mon	-40	a.m.	445	405	375
15-Apr	Tues	–	–	445	355	375
16-Apr	Wed	–	–	445	355	330
17-Apr	Thur	-40	a.m.	405	355	330
18-Apr	Fri	–	–	405	315	330
19-Apr	Sat	–	–	405	315	290
20-Apr	Sun	-30	a.m.	365	315	290
21-Apr	Mon	–	–	365	275	290
22-Apr	Tues	–	–	365	275	250
23-Apr	Wed	-30	a.m.	335	275	250
24-Apr	Thur	–	–	335	245	250
25-Apr	Fri	–	–	335	255	225
26-Apr	Sat	0	a.m.	305	255	235
27-Apr	Sun	–	–	305	225	235
28-Apr	Mon	–	–	305	225	205
29-Apr	Tues	–	–	295	225	205
30-Apr	Wed	–	–	295	215	205

Additional Elements of this Recommendation

This Recommendation anticipates the release of approximately 206 TAF of Restoration Flows to the river, leaving approximately 41.5 TAF of Unreleased Restoration Flows (URFs). However, the hydrology this Restoration Year has been quite variable, with one of the driest January's of record followed by average February-March period, then forecasts of a potentially dry April and May. **No URFs are released at this time – a reduced allocation in April or May is a distinct possibility. All URFs are retained until the runoff forecast becomes clearer.**

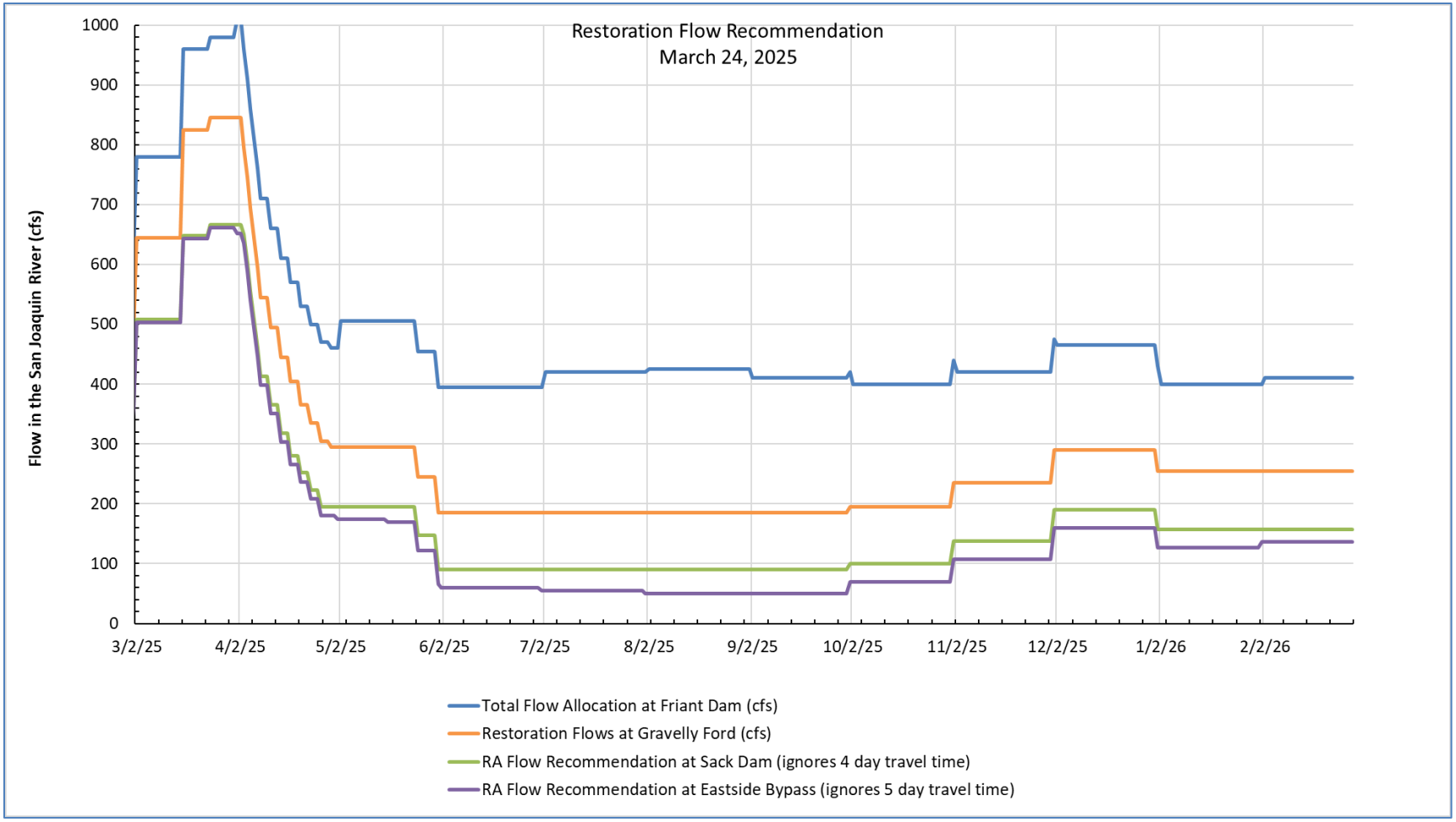
Depending on changing hydrologic and operations conditions, I will adjust or revise this Recommendation as necessary.

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.

Table 2. Summary Volumes

Gravelly Ford Flows Available Versus RA Recommendation	**Available**	**Used**	**Balance**
Total GRF River Flow Target without 5 cfs (March 1, 2024–February 28, 2025):	248.489 TAF	205.676 TAF	42.813 TAF
Restoration Allocation Flow	**248.489 TAF**	**206.648 TAF**	**41.842 TAF**
Exchange Flow	0.000 TAF	0.000 TAF	0.000 TAF
Buffer Flows	0.000 TAF	0.000 TAF	0.000 TAF
	URFs Disposed of as of	**1/15/2025**	**0.000**
Use Buffer Flows? no		Net Alloc Remainder	**41.842 TAF**


Restoration Flow Recommendation
March 24, 2025
Flow in the San Joaquin River (cfs)
1000
900
800
700
600
500
400
300
200
100
0
3/2/25
4/2/25
5/2/25
6/2/25
7/2/25
8/2/25
9/2/25
10/2/25
11/2/25
12/2/25
1/2/26
2/2/26
Total Flow Allocation at Friant Dam (cfs)
Restoration Flows at Gravelly Ford (cfs)
RA Flow Recommendation at Sack Dam (ignores 4 day travel time)
RA Flow Recommendation at Eastside Bypass (ignores 5 day travel time)

From: Moore, Chadwick A <cmoore@usbr.gov>
Sent: Friday, March 14, 2025 3:19 PM
To: tom johnson
Cc: Adam Hoffman; Phillips-Dowell, Alexis@DWR; Shriver, Andy@Wildlife; Kladzyk Constantino, Anna; Luce, Bill; Friant Dam Operations, BOR FRO; Cooney, Breanne; Brian.Erlandsen; Burton, Carson A; Moore, Chadwick A; Chauncey Lee; Christopher Hunter; Chris White; Buenrostro, Christian; Christine Ruiz; chanson@hansonenv.com; Moyle, Craig; DGuintini; Dan Vink; 'David Grant'; Hyatt, David E; Van Rijn, David P; David Wierenga; Portz, Donald E; Welch, Doug; KITECK, ELIZABETH G; Simon, Elizabeth; emily.thomas; elimas@ltrid.org; equinley@deid.org; Erika Kegel; Foresman, Erin@Waterboards; Choquette, Evan S; Fergus Morrissey; gbobker@friendsoftheriver.org; Gerald Hatler; Greg Reis; hilary.glenn@noaa.gov; Ian Buck-Macleod; J. Scott Petersen (SLDMWA); Jake Rennert - NOAA Affiliate; Jarrett Martin; Jason R. Phillips; jmuhar@aewsd.org; Gallmann, Jeffrey S; Papendick, Jeffrey E; Andrieux, Jessica M; jwhite@sjrecwa.net; John Shelton; jwiersma@hmrd.net; Jonathan Ambrose - NOAA Federal; Julie Vance; Willems, Kaitlyn M; Armstrong, Karlyn A; Katie Duncan; Allen, Kaylee; Kenneth Richardson; kthielen; klawrence@swid.org; White, Kristin N; lauren.adams@waterboards.ca.gov; Johnson, Levi E; Howard, Logan M; meiling.colombano; mhagman@lindmoreid.com; Burgess, Oliver (Towns); pablo.arroyave; Ferguson, Patrick@Wildlife; Valverde, Pedro A; Peter Vorster; Street, Phillip A; Herrera, Rafael; Emerson, Rain L; FIELD, RANDI C; Victorine, Rebecca A; Story, Regina L; Rene Henery; GONZALEZ, RUFINO; sblue@aewsd.org; Newcom, Samuel (Joshua) J; Scott McBain; Seth Harris; Shane@LSJLD.org; Ottemoeller, Stephen H.; Steve Chedester; Tammy Kizziar; FitzHugh, Thomas; Patton, Thomas K; WASHBURN, THUY T; Tom Boardman; Tom Johnson; Tom Johnson; Khang, True@Waterboards; Wesley Walker; Sutphin, Zachary A
Subject: Re: Ad Hoc Restoration Flow Change

Tom,
Reclamation approves this ad-hoc flow change to raise the Gravelly Ford target to 825 cfs for the remainder of March. Reclamation is making a small increase at Friant Dam right now and plans to make an additional increase tomorrow followed by a clean-up Friant Dam increase on Wednesday, March 19. These adjustments will avoid flow oscillations at downriver locations and result in a steady flow of approximately 670 cfs below Sack Dam in the coming days.

Your ad-hoc recommendation does not require an additional water supply test. This flow schedule does not impact public safety and is consistent with the Settlement, Legislation, SJRRP Water Rights Order, and the Restoration Flow Guidelines.

Thank you,

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Chad Moore | *River Flow Coordinator*
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Chad
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From: tom johnson <tom@trjllc.com>
Sent: Friday, March 14, 2025 2:56 PM
To: Moore, Chadwick A <cmoore@usbr.gov>
Cc: Valverde, Pedro A <pvalverde@usbr.gov>; Story, Regina L <rstory@usbr.gov>; GONZALEZ, RUFINO <RGonzalez@usbr.gov>; Scott McBain <scott@mcbainassociates.com>; Greg Reis <greg@friendsoftheriver.org>; Ian Buck-Macleod <ibuckmacleod@friantwater.org>; Portz, Donald E <DPortz@usbr.gov>
Subject: [EXTERNAL] FW: DRAFT Ad Hoc Restoration Flow Change

Hi Chad –

I understand from our discussion that it is quite a storm down in Fresno, and that the SJR flow below Friant Dam has come up quite a bit. In order to take advantage of this natural pulse flow, I recommend that we will increase Restoration Flows to maintain the high flows below GRF, SJB and SDP through the end of March.

I understand that current best estimates of SJR flow anticipate flows at GRF of 900 cfs+, SJB of 800 cfs+, and SDP of 750 cfs+ pending diversions by various operators along the river. At the end of this rainfall-driven pulse, rather than reverting to the approved Recommendation flows of 655 cfs at GRF and approximately 520 cfs at SDP, please implement this Ad Hoc Recommendation. Hold flows at GRF at 825 cfs, which should yield a flow of 650 cfs – 670 cfs at SDP, depending on losses. Maintain the flow level at GRF through March 31, then return to the currently approved Restoration Flow schedule for April and beyond.

To implement this Recommendation, you would increase flows from Friant Dam as dictated by SJR conditions, so the rainfall pulse hydrograph descending limb settles at the appropriate Restoration Flow at GRF.

Since this Ad Hoc Recommendation is within the RFGs for the flexible spring flow period, a water supply test should not be required.

Please let me know if you have any questions or concerns.

TJ

Tom Johnson

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