BUREAU OF RECLAMATION

Stanislaus Stepped Release Plan – Water Year 2026 Spring Pulse Flows Final Operations Plan

This Stanislaus Stepped Release Plan (SRP) – Water Year 2026 (WY26) Final Operations Plan details Reclamation's plan for operating the Stanislaus River to meet WY26 Spring Pulse Flow (SPF) requirements. This Operations Plan incorporates feedback from the Stanislaus Watershed Team (SWT) convened on March 18, 2026, to discuss a WY26 SPF.

Background

SPFs are a component of the daily flow schedule in the 2023 SRP proposed in Reclamation's November 2023 Biological Assessment (2023 BA), evaluated in the National Marine Fisheries Service's (NMFS's) December 2024 Biological Opinion (2024 BiOp), and implemented per the December 2025 Record of Decision (ROD). As noted in the 2025 ROD Operation Plan (p. 6-5), the "Spring pulse flows address the outmigration and juvenile habitat stressors. Reclamation will release additional flows starting as early as March through as late as June." The 2025 ROD Operation Plan further notes (p. 6-5) that "Reclamation, through Governance, will schedule spring pulse flow volumes consistent with volumes in the Stepped Release Plan."

To determine the water year type, Reclamation uses the San Joaquin Valley "60-20-20" Water Year Hydrologic Classification (60-20-20 Index) based on a 90% Probability of Exceedance forecast, per the 2025 ROD.

Below, Reclamation summarizes the Operations Plan for the implementation of the SPF of WY26.

Water Volume Accounting

Based on the March 2026 90% forecast, the water year type was "Critical". Assuming the water year type does not change from Critical to Dry based on the April forecast at the 90%, the total required instream flow volume pursuant to the SRP for the April 1 through June 30, 2026, period is detailed below (Table 1).

Table 1. Details of SRP for Critical water year type per month in comparison to the proposed alternate Critical schedule.

Date Range	Water Year Type (Month of forecast)	Total Water Volume in Default Schedule (acre-feet; AF)	Total Water Volume in Alternate Schedule (AF)
4/1/25 - 4/15/25	Critical (March)	6,248	12,000
4/16/25 - 5/15/25	Critical (April)	40,959	35.207
5/16/25 - 6/15/25	*Critical (May)	9,223	9,223
6/16/25 - 6/30/25	*Critical (June)	4,463	4,463
Total	N/A	60,893	60,893

*Assumes the water year type does not change based on future forecasts.

Note: Water year type is updated mid-month based on snow surveys.

Reshaped Flows

For WY26, Reclamation intends to implement a reshaped spring pulse flow according to the flow schedule described in Alternative-Critical (Alt-CD 2).

At the March 18, 2026, SWT meeting, the technical team discussed, reviewed, and provided feedback on the Alt-CD 2 option for WY26 SPF (Figure 1). Reclamation assumes that the water year type is not going to change from Critical to Dry based on the April 8th forecast (B120 Bulletin) at 90% probability of exceedance. The default SRP Critical schedule has the same total volume (~60,893 AF) for the April 1 - June 30 period as the Alt-CD 2 (Table 1). Reclamation and the SWT believe that the Alt-CD 2 reshaping optimizes biological benefits by providing a pulse that may cue anadromy and improve migratory habitat in both the Stanislaus River and the mainstem San Joaquin River and southern delta. In the Stanislaus River, higher flows are expected to reduce water temperature (or at least buffer daily maximum water temperature) and inundate some shallow water habitat, which may provide juvenile salmonids with short-term growth benefits as well as potential refuge from predation. In the mainstem San Joaquin River and south delta, higher flows from the Stanislaus River (and other San Joaquin tributaries) are expected to convey out-migrating salmonids more rapidly along their migratory pathway, which may improve outmigration success.

Some key features of the Alt-CD 2 SPF include:

- As in the default schedule, higher spring flows (compared to winter base flows) are intended to cue outmigration and improve migratory habitat downstream.
- Reshaping the one pulse identified in the default SRP schedule into four peaks for the first half of the pulse period increases flow variability within the season. This variability is expected to provide opportunities for a broader range of salmonid outmigration timing since outmigration may be cued by variability as well as flow magnitude (Zeug et al. 2014).
- The time frame of the Alt-CD 2 pulse is expected to provide some inundation of shallow-water habitat and temperature buffering from mid-April through mid May; the extent of such benefits will vary with flow throughout the spring pulse period. The timing of Alt-CD 2 puts most of the pulse volume in a 30-day window, which aligns better with the State Water Resources Control Board D-1641 Vernalis pulse flow period.
- Other considerations for in-basin interests:
    - No flows >2,500 cfs are scheduled in consideration of concerns regarding the stability of the weir at Riverbank, as well as attempting to minimize agricultural seepage.

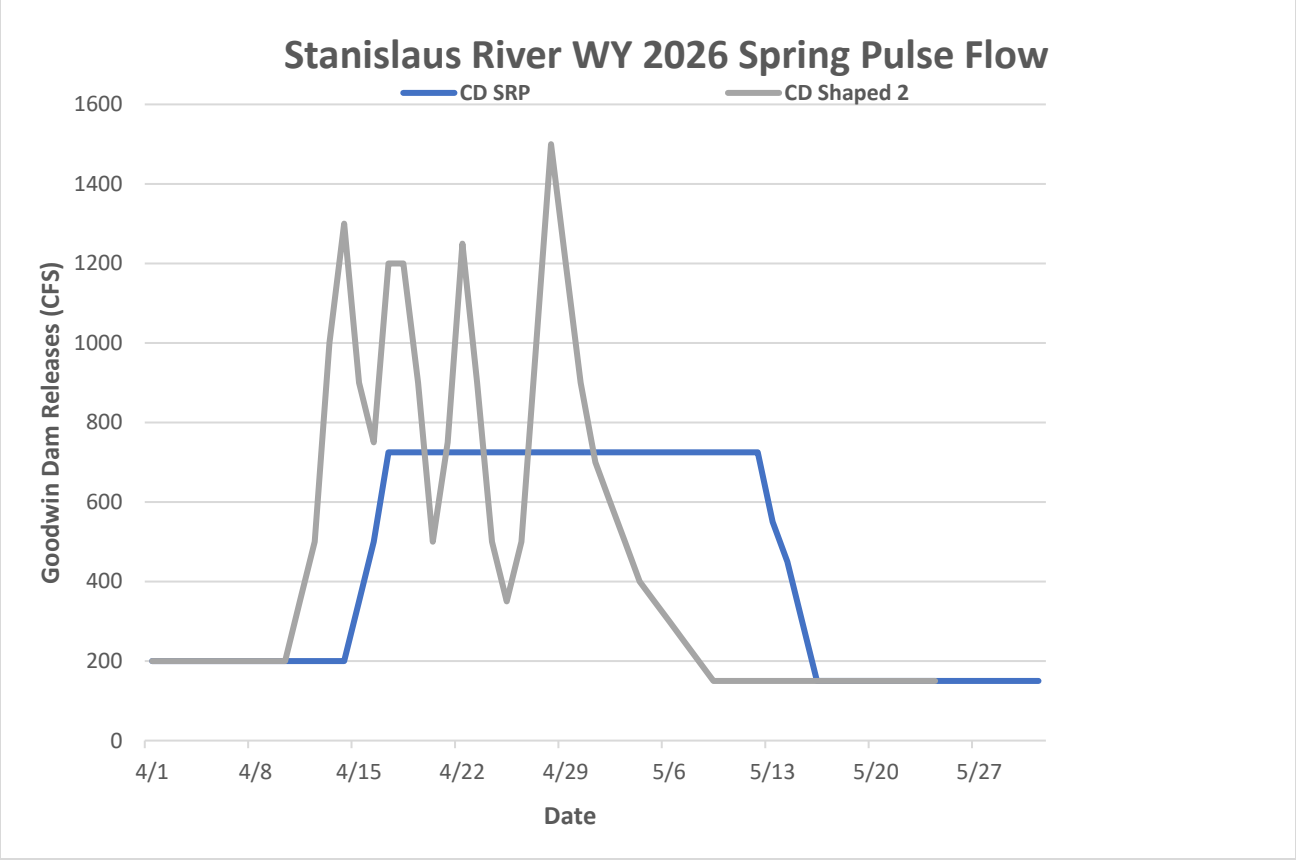

Figure 1. Daily flows in the default SRP (Critical SRP) and proposed Alt-CD 2 (Critical Shaped) schedule for a Critical water year.

Figure 1 is a line graph with the Critical SRP Spring Pulse flow shown in blue and the Alt-CD 2 Spring Pulse Flow in grey. The Critical SRP Pulse Flow would increase on April 15 from 200 to 700 cfs and remain at 700 cfs until May 17 before returning to 175 cfs. The Alt-CD Spring Pulse Flow would consist of several sharp increases starting April 10, ranging from 1,200 to 1,500 cfs, with periods of flows between 300 and 700 cfs before returning to 175 cfs in early May.

Table 2. Daily Flow Schedule for the SRP Critical and the shaped Alternate Critical (Alt-CD 2)

Date	SRP Critical (cfs)	Alt-CD 2 (cfs)
4/1/2025	200	200
4/2/2025	200	200
4/3/2025	200	200
4/4/2025	200	200
4/5/2025	200	200
4/6/2025	200	200
4/7/2025	200	200
4/8/2025	200	200
4/9/2025	200	200
4/10/2025	200	200
4/11/2025	200	350

Date	SRP Critical (cfs)	Alt-CD 2 (cfs)
4/12/2025	200	500
4/13/2025	200	1000
4/14/2025	200	1300
4/15/2025	350	900
4/16/2025	500	750
4/17/2025	725	1200
4/18/2025	725	1200
4/19/2025	725	900
4/20/2025	725	500
4/21/2025	725	750
4/22/2025	725	1250
4/23/2025	725	900
4/24/2025	725	500
4/25/2025	725	350
4/26/2025	725	500
4/27/2025	725	1000
4/28/2025	725	1500
4/29/2025	725	1200
4/30/2025	725	900
5/1/2025	725	700
5/2/2025	725	600
5/3/2025	725	500
5/4/2025	725	400
5/5/2025	725	350
5/6/2025	725	300
5/7/2025	725	250
5/8/2025	725	200
5/9/2025	725	150
5/10/2025	725	150
5/11/2025	725	150
5/12/2025	725	150
5/13/2025	550	150
5/14/2025	450	150
5/15/2025	300	150
5/16/2025	150	150
5/17/2025	150	150
5/18/2025	150	150
5/19/2025	150	150
5/20/2025	150	150
5/21/2025	150	150
5/22/2025	150	150
5/23/2025	150	150
5/24/2025	150	150
5/25/2025	150	150
5/26/2025	150	150
5/27/2025	150	150

Date	SRP Critical (cfs)	Alt-CD 2 (cfs)
5/28/2025	150	150
5/29/2025	150	150
5/30/2025	150	150
5/31/2025	150	150
6/1/2025	150	150
6/2/2025	150	150
6/3/2025	150	150
6/4/2025	150	150
6/5/2025	150	150
6/6/2025	150	150
6/7/2025	150	150
6/8/2025	150	150
6/9/2025	150	150
6/10/2025	150	150
6/11/2025	150	150
6/12/2025	150	150
6/13/2025	150	150
6/14/2025	150	150
6/15/2025	150	150
6/16/2025	150	150
6/17/2025	150	150
6/18/2025	150	150
6/19/2025	150	150
6/20/2025	150	150
6/21/2025	150	150
6/22/2025	150	150
6/23/2025	150	150
6/24/2025	150	150
6/25/2025	150	150
6/26/2025	150	150
6/27/2025	150	150
6/28/2025	150	150
6/29/2025	150	150
6/30/2025	150	150