

San Joaquin River Restoration Program Restoration Administrator

Memorandum

Date: April 30, 2010

To: Jason Phillips – SJRRP Program Manager cc. Ed Salazar, David Mooney
and the TAC

From: Rod Meade

Subject: Transmittal of the RA Interim Flow Schedule Recommendation – May 1 through
December 1, 2010 (see Attached Flow Schedule Chart/Daily Flow Tables)

This memorandum transmits my response to your recent revised May 1 Annual Interim Flow Allocation and your request for an updated RA flow schedule recommendation for the remainder of this Restoration Year. The first section of this memorandum transmittal provides my recommended flow schedule. The second section addresses factors considered in formulating my updated recommendation. Prior to transmitting this recommendation I consulted with the TAC during an April 29 TAC conference call/web meeting to solicit TAC input relating to this recommendation.

RA Recommendation for the May 1 through December 1 Interim Flow Schedule

The RA recommends that Interim Flow releases from Friant Dam be increased to 1600 cubic feet per second (cfs) on May 1 consistent with the Interim Flow Release Chart and Daily Flow tabulations attached to this transmittal (see Attachment). Specifically, I recommend the following schedule for Friant Dam Interim Flow releases for the period May 1 through December 1, 2010:

1. Commencing May 1 and continuing through May 18, 1600 cfs should be released from Friant Dam for Interim Flows;
2. On May 19, Interim Flow releases from Friant Dam should be reduced to 800 cfs;
3. On May 24, Interim Flow releases from Friant Dam should be reduced to 500 cfs;
4. On May 29, Interim Flow releases from Friant Dam should be reduced to 350 cfs and continue through October 31 at 350 cfs;

5. On November 1, and continuing through November 10, Interim Flow releases should be increased to 700 cfs; and
6. On November 11 through December 1 the Interim Flow releases from Friant Dam should be 350 cfs.

Further, I recommend that by May 14, 2010, the RA and Reclamation meet to consider the RA flow schedule in light of continuing changes in meteorological conditions and updated runoff forecast data to determine whether this RA recommendation should be modified. The May 14 RA/Reclamation review would focus on whether to either extend the 1600 cfs releases beyond May 18 or whether to shorten the 1600 cfs release period to enable additional time for Friant Dam releases at the 800 cfs and/or 500 cfs release rates. This review also would address any other data or issues that would be relevant to the Friant Dam release schedule.

Factors Considered by the RA in Formulating this Recommendation

Reclamation and the RA concur that the recommended flow schedule would be consistent with the available Interim Flow volume for the designated time period and the Settlement terms relating to the flexible flow period. Because the current recommendation departs from previous RA flow schedule recommendations to Reclamation that incorporated a strategy calling for paired 9-day release “benches” (at 1100 cfs, 800 cfs and 500 cfs rates) on the ascending and descending limbs of the Interim Flow releases, I am providing a brief explanation of the reasons for this change in approach.

The paired 9-day release benches on the ascending and descending limbs were intended to enable the following data to be gathered:

- Flow-habitat information (water surface elevations, velocities, and other physical variables) in Reach 1
- Flow-inundation information (water surface elevations, aerial photograph flights) in all reaches
- Flow-temperature monitoring (continuous water temperature monitoring probes) in all reaches
- Flow losses and gains in Reach 2, 3, and 4 under steady state conditions

Subsequent to the most recent RA flow schedule recommendation (March 24, 2010), evolving hydrologic, meteorological and other conditions and information need factors were re-evaluated. The March 24 RA flow schedule recommended Friant Dam Interim Flow release at 1600 cfs for 25 days. The current recommendation is to: (1) provide for an 18-day Interim Flow Friant Dam release at 1600 cfs; (2) eliminate the 1100 cfs release on the descending limb; and

(3) reduce the length of the other two release benches (800 cfs and 500 cfs) on the descending limb of the hydrograph reflect the following considerations:

- The water year type has evolved into a Normal-Wet year, providing additional available Interim Flow volume;
- The Flow-habitat evaluation has been scaled back to simply collecting water surface elevation data, and this data can be collected without the need for 9-day benches;
- Flow-inundation aerial photographs were taken at 1,100 cfs and will be taken at 1,600 cfs, and the lower flow benches are less important because inundated area is expected to be small at those low flows;
- Meteorological conditions have been abnormally cool and wet in April, and expected higher air temperatures above 80 degrees Fahrenheit have not yet materialized. Assessing water temperatures under a variety of meteorological conditions (particularly warmer air temperatures) is important, such that assuring long-duration 1,600 cfs release bench is considered by several TAC members to potentially be more important than corresponding water temperature monitoring information at lower bench flows;
- Steady state flows are largely independent of Friant Releases in Reach 3 and 4 (controlled by Mendota Dam and Sack Dam, respectively), such that the Friant Dam release benches are most pertinent to Reach 2. The assessment of flow losses in Reach 2 was assessed by various flow benches on the ascending limb; assessment of flow losses under wet antecedent conditions would be impaired if the benches are removed; and
- The current water year provides the opportunity for a significant Interim Flow release bench at 1600 cfs and we do not know whether (or when) an opportunity for a lengthy 1600 cfs release from Friant Dam will be available in future, given the variability of water year types.

Thank you for your prompt consideration of this recommendation. I look forward to discussing this with you and your staff at your early convenience.