San Joaquin River Restoration Program
Restoration Administrator

Draft Memorandum

Date: November 14, 2010

To: Jason Phillips – SJRRP Program Manager

From: Rod Meade – Restoration Administrator

Subject: Revised RA 2010 Fall Pulse Flow Recommendation

Introduction and Background

On October 31 and November 5, 2010, I recommended to the SJRRP Program Manager that the scheduled increase from 350 cubic feet per second (cfs) to 700 cfs Interim Flow releases from Friant Dam be delayed. These prior RA recommendations to delay the 700 cfs releases from Friant Dam were based on consultation with the TAC and the federal agency liaisons.

The basis of my prior recommendations to delay commencement of the 700 cfs releases from Friant Dam was addressed in my November 5 recommendation:

- a one-week delay could potentially enable Reclamation, landowners, the RA/TAC and others to acquire additional information that would better inform the RA recommendation;
- there are no compelling monitoring or data compilation reasons to move forward with a November 8 commencement date for the 700 cfs release of Interim Flows, thus the SJRRP would not forgo opportunities to compile important data relevant to managing Fall Pulse flows downstream of the Mendota Pool by such a delay; and
- the one-week delay of the 700 cfs releases from Friant Dam will neither result in nor contribute to an inability to use the full volume of Interim Flow water provided for in Exhibit B of the Settlement, even if this means continuing the Interim Flow releases into early December.

Subsequent to my November 5 recommendation, you forwarded the full report compiled by the Irrigation Training and Research Center (ITRC) titled "*Impact of San Joaquin River Restoration Flows on Agricultural Fields Adjacent to Reach 4A of the San Joaquin River"* for my review. You also continued consulting with the landowners and the RA/TAC during this past week. Finally, you referred the ITRC report to Reclamation's technical study group for review and consideration as part of their effort to formulate an Interim Flow management strategy for Reach 4A.

My initial review of the ITRC report, consultation with TAC members and Reclamation indicates that the ITRC report raises a number of questions that either were not adequately addressed or need clarification. Despite your recent efforts, I still do not have sufficient seepage and groundwater information for the Nickel property to justify a specific flow management recommendation for Reach 4A. My understanding is that the Reclamation technical study group will not complete its recommendations until December.

I need to provide my Interim Flow recommendation for the November pulse flows in a timely manner so that Reclamation has the opportunity to review and implement my Interim Flow recommendations. Therefore, based on our discussions, review of the ITRC report and consultation with the TAC, I am forwarding the following Interim Flow schedule recommendations for the period commencing November 15 and continuing until the full Interim Flow volumes for the month of November are released from Friant Dam.

Interim Flow Recommendations

With respect to completing implementation of the 2010 Fall Pulse Flows, I recommend the following:

1. On November 15, increase Interim Flow releases from Friant Dam from the current 350 cfs to the 700 cfs Pulse Flow release.

2. Maintain the 700 cfs Pulse Flow releases from Friant Dam for a period of ten (10) days and end the 700 cfs releases on November 24.

3. On November 24, reduce the Interim Flow releases from Friant Dam to 350 cfs and maintain the 350 cfs Interim Flow releases until December 1, 2010.

4. All recommended Interim Pulse Flow releases from Friant Dam should be conveyed to the Mendota Pool and, when the Interim Flows reach the Mendota Pool, Reclamation should determine the appropriate release rate from Mendota Pool downstream to Reach 3 and downstream of Sack Dam to Reach 4A to avoid exceeding seepage and conveyance constraints.

5. Reclamation should base it decision(s) on flow management in Reaches 3 and 4A on the best available information relating to downstream seepage impacts in Reach 4A, including measured groundwater levels in the adjacent agricultural fields, stage and flow rate data for the San Joaquin River in Reach 4A.

I want to add a few comments relating to the underlying intent of Recommendation 5. The Nickel property and other agricultural lands adjacent to Reach 4A currently are fallow. In addition, river stage and groundwater elevation monitoring equipment is installed in a number of locations. For these reasons, Recommendation 5 is intended to encourage Reclamation to consider increasing current flows in Reach 4A to the extent that higher flows will not damage soils for future plantings on the adjacent lands. By increasing Reach 4A river flows in this manner, the SJRRP will optimize its ability to collect data during the Interim Flow period that better documents relationships between river flows, shallow groundwater elevations and shallow groundwater water quality. This information is necessary for the SJRRP to better

understand and define seepage constraints that would apply to future Interim Flow and Restoration Flow releases.

Discussion

Under future conditions, when telemetry instrumentation is complete and data has been compiled and evaluated in a manner consistent with a Study Plan, I would expect to be able to consult with the TAC and to provide specific Reach 4A flow management recommendations to the Program Manager. However, at this time, the information is not available to enable the RA to provide prudent and more detailed flow management recommendations for Interim Flows below Mendota Pool Dam. As noted earlier in this document, the Nickel property owner provided a report by the ITRC that considers the impacts of Interim Flows in Reach 4A on adjacent agricultural lands. It is important that Reclamation complete its data compilation and a technical assessment of the ITRC report to inform the decisions concerning flow conveyance constraints in Reach 4A.

It is important for all parties to understand and account for conveyance constraints downstream of the Mendota Pool Dam, including seepage and adjacent groundwater levels on adjacent lands along the San Joaquin River. These constraints must be verified and well documented. Two prior SJRRP management actions in Reach 4A were initiated by Reclamation to limit flow rates past Sack Dam to 300 cfs (May) and eliminate flows below Sack Dam (September); however, these actions have not been analyzed by Reclamation to identify “lessons learned” that could inform future flow management decisions.

Conclusions

For all of the above reasons, my current Interim Flow recommendation defers to Reclamation the determination of appropriate Interim Flows downstream of Mendota Pool Dam, but also encourages Reclamation to consider higher flows below Sack Dam to the extent that such flows will not damage soils on adjacent lands for future plantings, would reflect the best available technical data, and would be consistent with the requirements of the Settlement and the SJRRP Act.