

SAN JOAQUIN RIVER RESTORATION PROGRAM RESTORATION ADMINISTRATOR

July 21, 2011

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Subject: Transmittal of the San Joaquin River Restoration Program (SJRRP) Restoration Administrator (RA) 2010 Annual Report

Settling Parties:

I am pleased to submit the enclosed Restoration Administrator 2010 Annual Report for your review and information. The Annual Report is sent to you as directed by the San Joaquin River Stipulation of Settlement (Settlement), which requires the RA to submit a written report to the Settling Parties that assesses SJRRP progress during the prior year.

The TAC has provided invaluable consultation during preparation of this document; however, the content of the Annual Report is my responsibility and any questions or concerns should be directed to me. I look forward to continuing our collaborative efforts during 2011 to implement the SJRRP consistent with the terms of the Settlement.

Sincerely,



Roderick J. Meade
SJRRP Restoration Administrator

Enclosure: Restoration Administrator 2010 Annual Report

cc. Bill Luce, Friant Water Authority
Lindsey Spice-Zich, Resources Legacy Fund

San Joaquin River Restoration Program Restoration Administrator 2010 Annual Report



Prepared by:

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Prepared for:

San Joaquin River Restoration Program Settling Parties

July 2010

Cover photograph: 4,500 cfs flood control release from Friant Dam, January 2011.

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1. INTRODUCTION AND OVERVIEW

The *2010 Annual Report* is the fourth Annual Report prepared by the Restoration Administrator (RA) and submitted to the Settling Parties. Prior Annual Reports addressed progress in implementing the San Joaquin River Restoration Program (SJRRP) during 2007, 2008 and 2009.

1.1. SJRRP History

In 1988, a coalition of environmental groups, led by the Natural Resources Defense Council (NRDC), filed a lawsuit challenging the renewal of the long-term water service contracts between the United States and the Central Valley Project (CVP) Friant Division contractors. After more than 18 years of litigation of this lawsuit, known as *NRDC, et al., v. Kirk Rodgers, et al.*, the Parties reached agreement on terms and conditions of a settlement. On September 13, 2006, a Stipulation of Settlement (Settlement) was signed by the Settling Parties and subsequently approved by the Court on October 23, 2006. The “Settling Parties” include the NRDC, Friant Water Users Authority (now Friant Water Authority (FWA)), and the U.S. Departments of the Interior and Commerce. On the same day the state of California signed an MOU with the Settling Parties making them SJRRP implementation partners.

The San Joaquin River Restoration Program (SJRRP) created by the Settlement is a landmark effort. The SJRRP restoration area extends 153 miles downstream from Friant Dam to the confluence of the San Joaquin and Merced rivers. It is one of the largest river restoration projects of its kind in the country and is particularly complex because of its large scale, multiple partners and need to provide for major channel and facility improvements. The purpose is to restore river flows and natural habitat to levels capable of supporting reintroduced runs of Chinook salmon and other native fish populations. More than sixty miles of the historic mainstem of the San Joaquin River was dry in most years since the mid-1940’s because of the construction and operation of Friant Dam. In 2004 a federal court determined that the Bureau of Reclamation was in violation of California Fish and Game Code 5937 because they did not release enough water to keep fish in good condition downstream of Friant Dam.

The Secretary of the Interior (Secretary) is required to implement the terms and conditions of the Settlement. The Bureau of Reclamation on behalf of the Secretary took the lead in establishing the SJRRP to implement the Settlement. Now in its fifth year of implementation, the SJRRP is staffed by three federal agencies and two state agencies. The federal agencies are the Bureau of Reclamation (Reclamation), the U.S. Fish and Wildlife Service (USFWS) and the NOAA Fisheries Service (NOAA). The state agencies are the Department of Water Resources (DWR) and Department of Fish and Game (DFG). Collectively, these five agencies are referred to as the “Implementing Agencies” and their representatives serve on the Program Management Team (PMT) that oversees much of the implementation of the Settlement.

The Settlement establishes two primary goals: a “Restoration Goal” and a “Water Management Goal.” These goals are described below:

- Restoration Goal – The Settlement intent is to restore and maintain fish populations in “good condition” in the main stem of the San Joaquin River below Friant Dam to the confluence of the Merced River, including naturally reproducing and self-sustaining populations of salmon and other fish.
- Water Management Goal – Similarly, the Settlement intent is to reduce or avoid adverse water supply impacts to all of the Friant Division long-term contractors that may result from the Interim Flows and Restoration Flows provided for in the Settlement.

To assist the Secretary in achieving these goals, the Settlement calls for appointing an independent Restoration Administrator (RA) and establishing a Technical Advisory Committee (TAC) to provide consultation to the RA on technical issues. The roles and specific responsibilities for the RA and TAC are specified in the Settlement. The RA is required by Paragraph 10.c of Exhibit D in the Settlement to prepare an Annual Report that assesses progress toward implementing the Settlement during the previous calendar year. The Annual Report is to be submitted to the Settling Parties. Once the Annual Report is received and reviewed by the Settling Parties, it will be made available to the public and the Settling Parties will file a copy with the Court.

1.2. Phased Implementation of the Settlement

The PMT identified three (3) Settlement Implementation “Stages” in its 2008 SJRRP Annual Report. Each of these stages is briefly described below.

Stage 1 of the SJRRP began in 2007 and focused on program-level “pre-flow” planning and information gathering. Stage 1 ended with the October 1, 2009, releases of Interim Flows from Friant Dam.

Stage 2 of Settlement implementation began with the release of Interim Flows on October 1, 2009, will continue into 2014. It includes the following actions:

- Continuation of Interim Flow releases from Friant Dam through the end of 2013;
- Interim Flow monitoring and analyses;
- Initial re-introduction of spring-run and fall-run Chinook salmon to the San Joaquin River;
- Commencement of Restoration Flows (no later than January 1, 2014); and
- Completion of the Interim Flow Study Report by the PMT in mid-2014.

Stage 2 will end when the Interim Flow Study Report is distributed to the public in 2014.

Stage 3 will begin with the commencement of Restoration Flows in 2014. It will involve the actions necessary to achieve full implementation of Restoration Flows, completion of SJRRP construction projects and ongoing conduct of related monitoring and management activities.

1.3. 2010 Annual Report Overview

This Annual Report addresses the following topics:

Settlement implementation activities and accomplishments of the SJRRP (those related to the SJRRP staff) during 2010, including progress toward achieving Settlement milestone actions and related Congressional or other federal activities;

- SJRRP Program, RA and TAC activities and accomplishments during 2010, including consultation with the Implementing Agencies, other state and local agencies and interest groups, and a summary of RA and TAC expenditures in support of Settlement activities;
- Impediments to progress toward achieving the Settlement Restoration Goal during 2010;
- Challenges to achieving the Restoration Goal that are expected to be encountered during 2011 and succeeding years;
- RA and TAC goals for 2011; and
- Additional RA recommended measures to achieve the Restoration Goal.

During preparation of this Annual Report the RA consulted with TAC members and federal liaison representatives.

2. 2010 SJRRP ACTIVITIES AND ASSESSMENT OF PROGRESS

This section discusses SJRRP activities during 2010, including significant achievements, impediments to progress.

2.1. 2010 SJRRP Settlement Milestones for 2010

The only major Settlement Milestone designated for completion was the preparation of the §10(a)1(A) permit application for reintroduction of the spring run Chinook salmon. As discussed below, this Milestone was successfully achieved. However, other significant milestones that were not achieved during 2009, as set forth by the Settlement in Settlement Exhibit C, became milestones that were re-scheduled to be achieved during 2010 as identified in the San Joaquin River Restoration Program (SJRRP) 2010 Annual Report (SJRRP 2010 Annual Report). The most significant of these unmet Settlement milestones involved necessary programmatic NEPA, NHPA, ESA, CEQA environmental compliance documents.

2.2. 2010 SJRRP Activities

A discussion of some of the SJRRP activities and accomplishments during 2010 is provided in the *San Joaquin River Restoration Program (SJRRP) 2010 Annual Report (SJRRP 2010 Annual Report)*. This Report and prior SJRRP Annual Reports are available at www.restoresjr.net. The *SJRRP 2010 Annual Report* (pages 11–23) describes a broad range of technical, environmental, regulatory permitting, public outreach and consultation activities which were conducted during 2010 by the SJRRP Team and were designed to contribute to achieving the Settlement's Restoration Goal and Water Management Goal. For brevity, I refer readers to the *Progress and Accomplishments* section of the *SJRRP 2010 Annual Report*. Some of the described SJRRP activities involved consultation with the RA and those activities/actions are identified in the discussion of RA and TAC accomplishments contained later in this Report.

Exhibit C of the Settlement sets forth the milestones for major program actions and it does not identify specific environmental compliance or project improvement milestones for 2010. The *SJRRP 2009 Annual Report* (see p. 25), however, did identify completion of the Draft Programmatic Environmental Impact Statement/Environmental Impact Report (PEIS/R) and Final PEIS/R documents during 2010 inasmuch as the PEIS/R compliance documents were not completed by September 2009 as envisioned by the Settlement.

The 2010 SJRRP Annual Report (at p. 23) identified program activities expected to continue during 2011. For a more complete discussion of SJRRP goals refer to the *SJRRP 2010 Annual Report*.

2.3. Assessment of SJRRP Progress during 2010

More than four years have elapsed since the Settlement was signed in September 2006 by the Settling Parties. The *SJRRP 2010 Annual Report* documents the significant progress made by the SJRRP toward achieving the Settlement's Restoration Goal and Water Management Goal during 2010, as evidenced by the work accomplished by the Implementing Agencies, consultant teams, Technical Work Groups and Specific Project Teams that worked together and with involved local

and state government agencies and public interests. My assessment of progress achieved by the SJRRP during 2010 is provided in this section, starting with a discussion of SJRRP actions and work products expected to be completed during 2010 .

2.3.1. Actions and Work Products Anticipated to be Completed During 2010

To assess SJRRP progress during 2010, I considered the following significant actions and work products that were identified for completion by the SJRRP during 2010:

- Completion of the programmatic environmental compliance documentation identified in Exhibit C of the Settlement that was originally scheduled for completion during 2009;
- Completion of the Enhancement of Species Permit Application by the USFWS and submittal to NOAA Fisheries for action;
- Completion of the Interim Flow Monitoring Program and installation of the monitoring wells, stream gages, and instrumentation necessary to fully implement the Monitoring Program;
- Preparation and Submittal of the spring-run Chinook salmon Section 10(a)(1)(A) Reintroduction Permit Application to NOAA;
- Implementation of an Interim Flow Release hydrograph consistent with the terms of the Settlement;
- SJRRP Program Manager response to the RA request for guidance concerning a recommended study to reoperate the Chowchilla Bifurcation Structure to allow portions of the Interim Flow releases in excess of channel conveyance capacities downstream of the Bifurcation Structure to be diverted to the Chowchilla Bypass;
- Completion of the other actions and work products identified/recommended in the *SJRRP 2010 Annual Report*; and
- Demonstration of significant progress toward achieving Settlement Milestones and identified SJRRP goals for years 2011 and after.

Progress toward achieving these tasks is discussed briefly in the following subsections. Section 2.3.2 addresses the successes achieved by the SJRRP while Section 2.3.3 identifies areas where the SJRRP was not successful during 2010.

2.3.2. SJRRP Accomplishments During 2010

Substantial SJRRP progress was achieved during 2010 on several key actions and work products required by the Settlement and Legislation. Of particular significance is the degree of progress on the required actions identified below.

Progress on the Programmatic Environmental Compliance Documents

According to Exhibit C (Paragraph 11 Milestone Dates) of the Settlement the Final PEIS/R and related documents were to be completed by September 2009. By the end of 2009, neither the Draft PEIS/R nor the Final PEIS/R had been completed. A SJRRP goal for 2010 was to complete the Draft PEIS/R, distribute the Draft PEIS/R for public review, and complete the Final PEIS/R. By the end of 2010, the Draft PEIS/R still was not complete; thus, the public review and comment period had not been initiated and efforts to complete the Final PEIS/R had not been

initiated. The implications of the continuing delay in completing the Final PEIS/R and related environmental compliance documents are addressed in Section 2.3.3.

Completion of the Fish Management Plan (FMP)

The FMP was scheduled to be completed by the SJRRP in 2009. A draft FMP was completed in June 2009; however, the final FMP was not completed until November 2010. By the end of 2010 the SJRRP also had completed the following key technical reports related to the FMP: (1) the Draft Fisheries Implementation Plan; (2) the Hatchery and Genetics Plan; and (3) the Stock Selection Strategy. These were significant accomplishments for the SJRRP from both a technical and an environmental compliance perspective and insofar as these work products constituted strides toward achieving the Restoration Goal.

However, because the FMP was delayed by more than a year the overall SJRRP program did not benefit in a timely manner from the vision and direction expected to be provided by the FMP commencing in September 2009. Further, the FMP did not directly address fish restoration needs related to consideration of the designs of major project improvements in Reach 2B, the Mendota Bypass, Reach 4B and the Eastside and Mariposa Bypasses that were required by Paragraph 11 of the Settlement. As a result, the Specific Project Teams responsible for planning and designing the necessary infrastructure improvements were not informed by the FMP and fish management agencies concerning the fish habitat and restoration needs that should have been considered during the early design phases and environmental documentation for these facilities. Some disconnect between engineering designs, provision for fish habitat needs and environmental compliance was apparent.

Completion of the §10(a)1(A) Enhancement of Species Permit Application by the USFWS

The Settlement required the SJRRP to submit an application (the §10(a)1(A), Enhancement of Species Permit Application for the Re-Introduction of Central Valley Spring-Run Chinook Salmon into the San Joaquin River) to NOAA by September 30, 2010. Spring run Chinook salmon cannot be reintroduced into the San Joaquin River unless NOAA approves the §10(a)1(A) permit application submitted by USFWS. The USFWS successfully completed the §10(a)1(A) application in September 2010 and submitted it to NOAA as required by the Settlement, marking a major accomplishment for the SJRRP. NOAA Fisheries initiated review of the §10(a)1(A) permit application in October 2010 and has until April 2012 to complete its review and determine whether the application provides information sufficient to issue the required reintroduction permit.

Progress on Completion of the Interim Flow Monitoring Program and Installation of Necessary Instrumentation

The Settlement (Paragraph 13(j)) required the SJRRP to prepare procedures for measurement, monitoring and reporting daily releases of the Restoration Flows at the locations listed in Paragraph 13(g) prior to commencement of Restoration Flows. The Legislation (Sec 10004(h) (1) required the Secretary to prepare an analysis in compliance with NEPA that included as a minimum a seepage monitoring program, evaluation of possible impacts associated with the release of Interim Flows and a description of the associated flow monitoring program. The Monitoring Program is needed to guide the compilation and analyses of information gathered

during the Interim Flow releases and to systematically record conditions in the mainstem of the San Joaquin River and on adjacent lands potentially subject to any seepage impacts related to implementation of the Interim Flows.

Instrument installation is needed to fully implement monitoring of Interim Flows in preparation for implementation of the Restoration Flows. As a result, the SJRRP has not able to: (1) fully monitor and support real-time management of the Interim Flow releases; (2) adequately document the effects of the Interim Flow releases downstream of Friant Dam; and (3) fully account for the downstream flow rates and volume of Interim Flows at all of the locations specified in Paragraph 13(g) of the Settlement. In fairness to SJRRP staff and agencies, a significant contributor to the delays in installing field equipment was due to the difficulty in obtaining landowner permission for access to install needed instrumentation.

Progress on Completion of the Seepage Monitoring Program and Installation of Necessary Wells

During 2010 the SJRRP achieved significant progress toward establishing a Seepage Monitoring Program. In addition to installing more than 100 monitoring wells on lands adjacent to the San Joaquin River the SJRRP initiated a Seepage Management Technical Feedback Work Group that began meeting in late 2010. This Technical Feedback Work Group includes participation by the Implementing Agencies, non-federal Settling Parties, the RA and TAC, and other interests.

Completion of other 2010 Recommended Tasks and Work Products

The *2009 SJRRP Annual Report* recommended a list of actions/work products that were to be completed during 2010 (see p. 23). With the exception of the recommendations to complete the PEIS/R, the recommendations contained in the *2009 SJRRP Annual Report* involve ongoing efforts that were not expected to be completed during 2010.

As noted above the SJRRP did not complete the PEIS/R during 2010; however, the SJRRP was successful in completing the *Fish Management Plan* in November 2010. In addition, the SJRRP continued to make progress on the remaining 2009 SJRRP recommendations.

Demonstration of significant progress toward achieving Settlement Milestones Identified for Completion in 2011 and Future Years

The *SJRRP 2010 Annual Report* provides a detailed summary of the activities and work products in its *Progress and Accomplishments* section (see pp. 11–23). The variety and quantity of work identified in the *Progress and Accomplishments* section demonstrates very significant progress toward achieving Settlement Milestones scheduled for completion during 2011 and coming years of the SJRRP. In terms of future Settlement Exhibit C Milestones, however, it is likely that the SJRRP will not be able to meet the Settlement timelines for construction of the Mendota Pool Bypass/Reach 2B improvements or the Reach 4B/Eastside Bypass improvements. The Settlement (Exhibit C) anticipated completion of these projects and several others between December 2011 and December 2013.

2.4. Impediments to Achieving SJRRP Goals

A combination of impediments contributed to limiting progress on major SJRRP goals. Some of these impediments to progress were external to and beyond the control of the SJRRP while others were not. For instance, the SJRRP was not responsible for the refusal by some landowners to

permit access to properties adjacent to the San Joaquin River so that needed site surveys and installation of necessary groundwater wells and instrumentation could be completed.

However, a significant factor in the lengthy delays in the Draft PEIS/R was related to the failing to resolve contracting issues with the primary contractor responsible for preparing the Draft and Final PEIS/R were within the SJRRP control. These and other issues were discussed in prior RA Annual Reports and will not be addressed again in this Report. Also within the control of the Implementing Agencies were the delays related to DWR's late expressions of concern about flood liability issues raised by the SJRRP. These late DWR concerns delayed the SJRRP by about nine to twelve months.

Both ongoing (unresolved) and new impediments to SJRRP progress that are attributable to SJRRP implementation actions are addressed below.

2.4.1. Ongoing Impediments to Progress Addressed in Previous RA Annual Reports

The following impediments to SJRRP progress have been discussed in prior RA reports, but because they were not resolved by the SJRRP during 2010 it is necessary to again mention these ongoing issues and describe the implications of their continuing impacts to implementation of the SJRRP.

Delay in Completing the Programmatic Environmental Compliance Documents (PEIS/R, and related documents)

The continuing delay in completing the programmatic environmental compliance documents in 2010 presents ongoing problems for the SJRRP. The lack of approved compliance documentation created the need for additional work during 2010 that could have been avoided by the timely completion of the environmental compliance documents (*i.e.*, the need to complete the Supplemental Environmental Assessment [SEA] and State Water Resources Control Board [SWRCB] permit application to allow Interim Flow releases to continue past September 2010). The failure to complete the programmatic environmental compliance documentation during 2010 will continue to impact the ability of the SJRRP to achieve Settlement Milestones in a timely manner during 2011 and, potentially, in future years. Major infrastructure improvements required by the Settlement rely on completion of the program environmental documentation.

The PEIS/R and related documentation provide the program environmental compliance documentation foundation necessary to demonstrate overall SJRRP consistency with the National Environmental Policy Act (NEPA), National Historic Preservation Act (NHPA), the Federal Endangered Species Act (FESA), and the California Environmental Quality Act (CEQA). Failure to complete the PEIS/R also meant that the SJRRP could not complete the necessary Record of Decision (ROD) and Notice of Determination (NOD) as required by NEPA and CEQA, respectively, during 2009 and 2010. Finally, failure to complete the above compliance documents meant that the documentation necessary to obtain the SWRCB permits for the Interim Flow Program beyond 2011 was not available. The implications of the inability to complete these actions are discussed below.

Because the SJRRP did not complete the PEIS/R, ROD and NOD in 2009, it was necessary to divert significant SJRRP staff and funding resources during 2010 to prepare and process a separate one-year Supplemental Environmental Assessment (SEA) to accompany the SJRRP

application to the SWRCB for permits to allow Interim Flow releases to continue on October 1, 2010. That parallel work effort was ultimately successful, but it impeded progress on the completion of the Draft PEIS/R document that already was behind schedule.

Landowner Restrictions on Access to Facilities and Lands

The SJRRP continues to be impacted by access restrictions imposed by landowners and, in some cases, refusals to permit access by Implementing Agency staff or SJRRP consultants to lands adjacent to the river. The access restrictions imposed by certain landowners impacted SJRRP progress during 2010 on a range of important monitoring and environmental compliance tasks including, but not limited to, installation of needed monitoring wells, other monitoring instrumentation and completion of environmental surveys on private lands adjacent to the river, and inability to do geotechnical surveys of levee stability. At this point, it appears likely that on certain properties along the river, these access issues will continue to be a problem.

Restrictions on Interim Flow Releases and Downstream Conveyance Capacity Due to Potential Seepage Impacts

Exhibit B of the Settlement establishes Default flow releases from Friant Dam and downstream flow targets at specified locations below Friant Dam that are required to be met for each of the water year types identified in the Settlement unless unexpected seepage losses or seepage impacts on adjacent agricultural lands prevent attaining these downstream targets.

2010 was a “Normal-Wet water year” as defined by Exhibit B of the Settlement. Exhibit B establishes flow target requirements for each reach in a “Normal-Wet” year that, in March and April, are greater than the existing Reclamation channel capacity ratings, as illustrated on the left hand side of Table 1. The maximum Interim Flow achieved in the respective Reaches during the spring flow releases also is shown. As can be seen, the actual Interim Flows in the respective river Reaches did not achieve either the Exhibit B Default Flow targets or the “Capped Flow” targets identified by Reclamation during the spring of 2010 (Table 2). The reason for the restricted flows within Reaches 2, 3 and 4 was the concern that flows above the actual flows allowed by Reclamation could result in seepage and groundwater level impacts on some adjacent agricultural lands in these Reaches.

Table 1. Default Normal-Wet year flows and channel and 2010 maximum interim flow capacity.

| | Default Normal-Wet Year Flows (cfs) | | | 2010 Maximum Interim Flow Capacity (cfs) | Channel Capacity (cfs) |
|----------|-------------------------------------|------------|-------------|--|------------------------|
| | March 16-31 | April 1-15 | April 16-31 | | |
| Reach 2A | 1,375 | 2,355 | 3,855 | 1,300 | 8,000 |
| Reach 2B | 1,225 | 2,180 | 3,655 | 1,300 | 1,300 |
| Reach 3 | 1,225 | 2,180 | 3,655 | 700 | 1,300 |
| Reach 4A | 1,225 | 2,180 | 3,655 | 700 | Not rated* |

*Reach 4 rating pending ongoing seepage management investigations

Prior to completion of improvements along the mainstem of the River, the Settlement requires that Interim Flows be constrained by then existing channel conveyance capacities. To understand the effect of seepage impacts on Interim Flow management decisions during 2010, it is necessary to understand difference between the “capped flows” that are based on the rated threshold of an existing channel within a Reach and the actual ability of the SJRRP to allow flows in those Reaches to increase to flow rates in a particular Reach at a particular time without causing seepage impacts.

Accordingly, Exhibit B releases and downstream flows were “capped during 2010 consistent with existing channel conveyance capacities and Reclamation responses to potential seepage impacts as reflected by well monitoring data and call from adjacent owners of agricultural lands. Actual conveyance capacity is subject to limits imposed when increases in Interim Flows downstream of Friant Dam can be linked to seepage that results in rising groundwater levels on agricultural lands located adjacent to the river channel. For instance, in its November 8, 2010 Allocation and Flow Bench Evaluation, Reclamation applied “capped” conveyance thresholds to Reaches 2 through 4 to reflect the ability to convey flows while avoiding potential seepage impacts on adjacent agricultural lands (Table 2)

Table 2. Fall pulse flows released in 2010.

| | 2010 Fall Pulse Flows | |
|----------|--|---|
| | Normal-Wet Year Default Flows (cfs) Exhibit B | Capped Conveyance Threshold (cfs) per November 8 Flow Bench Evaluation |
| Reach 2A | 575 | 575 |
| Reach 2B | 475 | 475 |
| Reach 3 | 475 | 380 |
| Reach 4 | 475 | 95 |

Prior to encountering the effects of increased Interim Flows in downstream Reaches, my recommended Friant Dam releases and downstream flows were based on capacity conveyance ratings for each channel Reach as illustrated in Table 1. However, as groundwater monitoring well data became available, seepage impacts identified by adjacent landowners in Reaches 2, 3 and 4 resulted in Reclamation imposing limits on flows below the Mendota Dam in Reaches 3 and 4A in order to prevent seepage impacts. That is why Reach 3 Interim Flows were not permitted to reach either the 1,700 cfs rated capacity or the Exhibit B Default Flows (Table 1), and why flows in Reach 4A below Sack Dam also were restricted substantially.

The net effect of potential seepage impacts in 2010 was to significantly restrict Interim Flows below the Mendota Dam, thus limiting maximum sustained Interim Flow releases from Friant Dam and the amount of information that could be collected and evaluated for the purposes of informing future Restoration Flow management. During a two-week period in May 2010, Reclamation studied surface-groundwater interactions in Reach 4A and determined that it would be necessary to reduce Sack Dam flow targets from 700 cfs to 300 cfs before allowing flows to be restored to the prior 700 cfs flow target. During June 2010, SJRRP responded to landowner input by limiting flows below Sack Dam to 80 cfs. Flows below Sack Dam were also reduced to zero during September 2010 to allow sand removal in the Eastside Bypass channel downstream of the Sand Slough Control Structure.

Delay in Responding to the RA Request to Study Reoperation of the Chowchilla Bifurcation Structure

In August of 2009 I submitted a recommendation to the SJRRP Program Manager to study to the potential benefits and impacts associated with reoperation of the Chowchilla Bifurcation Structure to allow Interim Flows and Restoration Flows. My recommendation was based on my interpretation of Settlement Paragraph 12 which states:

The Parties acknowledge that there are likely additional channel or structural improvements (including, for example, additional fish screening, restoration of side channel habitat and augmentation of spawning gravel) that may further enhance the success of achieving the Restoration Goal. The Restoration Administrator shall identify and recommend to the Secretary such additional improvements and potential measures.

If supported by the recommended study, the reoperation would be subject to obtaining necessary environment clearances, approval by responsible state/federal regulatory agencies and could require landowner agreements. If implemented, reoperation of the Bifurcation Structure would enable a portion of Interim Flows to be diverted to the Chowchilla Bypass when Interim Flow releases from Friant Dam resulted in flows reaching the Bifurcation Structure that exceeded the conveyance capacity of Reach 2B or other downstream Reaches. My 2009 recommendation is attached to this Report (see Attachment 1, the August 2009 RA Recommendation). FWA objected to the recommendation on the grounds that use of the Chowchilla Bypass is outside the Stipulation of Settlement and to study such possible use was not necessary, productive or effective. FWA also objected to the reoperation study recommendation on the grounds that Paragraph 12 did not provide for such a study. NRDC concluded the recommendation was in keeping with requirements of the Settlement and therefore supported the recommended study.

Between August 2009 and late October 2010, the Program Manager did not provide a formal response to me or the non-federal Settling Parties concerning my recommendation to study reoperation of the Bifurcation Structure. After more than a year of consideration and after receiving several requests for a formal response to the August 2009 RA recommendation, on October 27, 2010 the Program Manager requested that the RA provide an updated recommendation to study reoperation (see Attachment 2) In response, I submitted a December 1, 2010 updated recommendation to the Program Manager (see Attachment 3, Transmittal of the updated recommendation and an Updated Recommendation Report). As suggested in my original 2009 recommendation, the requested reoperation study would examine both the benefits and potential impacts associated with diverting a portion of Interim Flows to the Chowchilla Bypass.

My December 2010 updated recommendation explained why I believed that the reoperation study continued to be needed and why the need was arguably more pressing in December 2010 that it had been in August 2009. Below I provide a bulleted summary of the reasons I continued to recommend the reoperation study and for those wanting more detail I refer you to Attachment 3 of this report. Reasons for studying reoperation of the Bifurcation Structure include:

- Channel capacity constraints identified in my August 2009 RA Recommendation were still present;

- Downstream channel conveyance capacity constraints in Reach 2B and Reach 4A became even more problematic during 2010 and additional Interim Flow restrictions in Reaches 2B and 4A may further impact the collection of data critical to implementing the Settlement;
- SJRRP delays in completing the PEIS/R and major project improvements in Reach 2B and 4B indicate that the channel conveyance capacity improvements will not be complete when Restoration Flows commence January 1, 2014;
- The combined effect of the SJRRP delays indicates that routing Interim and early Restoration Flows down the Chowchilla Bypass may be the most effective means of achieving the Interim Flows and Restoration Flow release targets for Friant Dam;
- The ability to direct Interim Flows and Restoration Flows down the Chowchilla Bypass also may provide the most appropriate means of routing the reintroduced juvenile salmon downstream as required by the Settlement by the end of 2012; and
- Chinook salmon reintroduced after 2012 likely will use the Chowchilla Bypass during flood flows and, given the likely presence of reintroduced Chinook salmon in the Chowchilla Bypass, it appears to be prudent to consider Interim and Restoration Flow routing options now that could contribute to survival of these salmon.

No progress in resolving this issue was achieved during 2010 as FWA and the Plaintiffs waited for Reclamation to respond to the RA recommendation.

Inadequate Interim Flow Accounting and Management at Mendota Pool

Interim Flows reaching the Mendota Pool (Pool) were not effectively accounted for during Fall 2009 and accounting issues related to operation of the Pool continued during 2010. The failure to conduct real time monitoring and accounting of Interim Flow impacted and continues to impact the ability of the SJRRP to document compliance with SWRCB Section 1707 Permit Conditions and resulted in inadequate accounting for Interim Flow releases entering and continuing downstream of the Mendota Pool (Figure 1).



Figure 1. San Joaquin River below the Mendota Dam (left) and view of Mendota Pool upstream of the Dam (right)

The ability to accurately account for Interim Flow releases as they flow downstream is essential to the long-term success of the SJRRP in terms of achieving both the Restoration Goal and Water Management Goal. All parties to the Settlement need an accurate understanding of whether water released from Friant Dam is being managed consistent with the terms of the Settlement and SWRCB permits. This means that all parties must be able to determine whether Interim Flows are being impounded and diverted contrary to the terms of the Settlement and permits and, if so, what needs to be done to correct such inconsistencies.

2.4.2. Impediments to SJRRP Progress Not Identified in Prior RA Annual Reports

In addition to those ongoing impediments to SJRRP progress that were discussed in prior RA Reports but not resolved by the end of 2010, additional impediments to progress came into focus during 2010, including delays in approving funding for construction of a new conservation fish hatchery to support Chinook salmon reintroduction and the failure of the SJRRP to effectively integrate consideration of fish habitat needs into the planning and design of major channel and facility improvements required by Settlement Paragraph 11. These two additional issues are discussed below.

Delays in Approval and Funding Construction of the Conservation Hatchery

Native spring run Chinook salmon are no longer present in the San Joaquin River and construction of a Conservation Hatchery facility (Hatchery) has been determined to be essential to fully implementing the Reintroduction Strategy for spring-run Chinook salmon. By the beginning of 2010, the Hatchery had been designed and a capital cost budget had been prepared by the DFG; however, the Hatchery had not received budget approval from the State Department of Finance because DFG had not been able to identify a source of operational funding for the proposed life of the facility and the state appeared to be considering removal of the Hatchery from the budget by the Department of Finance due to the lack of identified sources of operational funding.

The *Hatchery and Genetic Management Plan* (HGMP, December 17, 2010) provided the following schedule of milestones with respect to implementation of the Hatchery facility:

- September 2010: Hatchery Permit applications submitted;
- Fall 2010: Interim facility begins operations with fall-run Chinook salmon
- Summer 2011: Full-scale Hatchery begins construction
- Spring 2012: NOAA Fisheries Permit review completed and, if approved, broodstock collection commences
- Fall 2012: First spring-run salmon Chinook reintroduced to the San Joaquin River
- Summer 2014: Full-scale Hatchery begins operation
- Spring 2016: Potential first returns of Hatchery-origin salmon
- 2020: End of Reintroduction Period
- Fall 2020: First returns from full-scale Hatchery production

According to the HGMP the Hatchery facility is already behind schedule. The Fish Management Work Group (FMWG) has determined that captive rearing needs to commence as soon as possible. Without a functional Hatchery it may not be possible to fully implement the

reintroduction strategy formulated by the FMWG and submitted for consideration by NOAA as part of their deliberations on the 10(a)(1)(A) Reintroduction Permit Application submitted by FWS in September 2010. The full-scale Hatchery is needed to fully implement the reintroduction of spring-run Chinook salmon to achieve the spring-run Chinook population targets identified by the FMWG based on 2009 RA population target recommendations and those in the Fish Management Plan.

The new Hatchery would be located immediately below Friant Dam in Reach 1, adjacent to the existing DFG San Joaquin Hatchery that was built in the 1950's for production of trout. Pending completion of the Conservation Hatchery, DFG is committed to constructing and operating a Pilot Scale Interim Facility adjacent to the existing DFG hatchery facility through June 30, 2012, in order to address the need for near-term hatchery support for efforts to begin reintroducing spring run Chinook salmon by the end of 2012 as required by the Settlement. However, for the reasons identified above, construction of the Hatchery at the earliest possible time is a priority issue that needs to be addressed by the SJRRP.

Integrating Consideration of Fish Habitat and Passage Needs into Planning and Design of Paragraph 11 Infrastructure Improvements

During 2010 it became clear that the Specific Project Teams responsible for designing the major channel and facility improvements for the Reach 2B/Mendota Pool Bypass and Reach 4B and Eastside/Mariposa Bypasses were not receiving adequate guidance and participation concerning fish habitat and passage needs from members of the (FMWG) during preparation of preliminary project designs and environmental compliance documentation. Members of the FMWG, the non-federal Settling Parties, and the RA commented on the need for closer collaboration among the Specific Project Teams, Implementing Agencies and the FMWG on the Specific Projects identified in Paragraph 11 of the Settlement.

The limited interaction between FMWG members, the agencies responsible for engineering design of the Specific Projects and the Project Team consultants delayed consideration of important fish habitat/passage issues for the Reach 2B/Mendota Pool Bypass project and resulted in the need to halt and re-initiate the Reach 4B and Eastside/Mariposa project in order to provide opportunities to consider and incorporate comments/recommendations from the FMWG regarding provision for fish habitat/passage consistent with enabling the SJRRP to achieve the Settlement Restoration Goal.

3. RA RECOMMENDED 2011 SJRRP TASKS AND EXPECTED CHALLENGES

3.1. RA Recommendations for 2011 SJRRP High Priority Tasks and Work Products

The 2010 SJRRP Annual Report reviewed the range of SJRRP activities expected to occur during 2011. This section addresses my recommendations concerning 2011 tasks/goals that should be completed by the SJRRP in order to maintain progress toward implementing the Restoration Goal in a orderly and timely manner consistent with the Settlement.

My recommended high-priority activities for the SJRRP during 2011 involve completion of unfinished work products called out in the Settlement for completion prior to 2010, some of which were discussed in Section 2.3 of this Report. These priority actions supplement the description of planned activities for 2011 identified in the SJRRP 2010 Annual Report (see p. 27). Accordingly, in addition to those planned tasks 2011 tasks identified in the SJRRP 2010 Annual Report I recommend that the SJRRP give consideration to including the following additional tasks and work products among their highest priority efforts for 2011:

- Because the Final PEIS/R won't be completed in 2011, the SEA and Permit Application must be completed and submitted to the SWRCB in time to enable the SWRCB to review and consider approval of the one-year permit necessary to continue Interim Flow releases from Friant Dam commencing October 1, 2011;
- In addition to releasing the Draft PEIS/R in 2011, the SJRRP should complete the process of finalizing the PEIS/R to address public comments received during the public comment period for the Draft PEIS/R;
- Reclamation should follow through on its commitment to assist the DFG and state to fund costs for operating and maintaining the Conservation Hatchery;
- Reclamation should act on my recommendation to study reoperation of the Chowchilla Bifurcation Structure;
- SJRRP Implementing Agencies should continue working with the fish agencies and NOAA to prepare for reintroduction of spring run Chinook salmon by the end of 2012, as required by the Settlement;
- The Implementing Agencies should work with fish agencies to enable adult fall-run Chinook salmon access to Reach 1A spawning areas for informational needs and reintroduction seeding if subsequent outmigration conditions allow, and the fish agencies should prepare for the reintroduction of fall-run Chinook salmon by the end of 2012, as required by the Settlement.
- USFWS should designate a Coordinator to assure that consideration of fish management needs is integrated into planning/design efforts for the site-specific projects identified by the Settlement in Paragraph 11 and other SJRRP implementing actions;
- USFWS should provide for a senior staff position whose primary responsibility would be to oversee the fisheries component of the SJRRP and partner with the SJRRP PM on overall management of the SJRRP implementation.

- Reclamation should initiate a planning and public outreach process for Reach 4B/ Eastside and Mariposa Bypasses that involves the FMWG, RA/TAC and a broad range of stakeholders, including landowners, agencies and conservation and other public interest groups;
- SJRRP Implementing Agencies should complete installation of instrumentation needed for the Interim Flow Monitoring Program to document implementation of the Interim Flow Program;
- Reclamation should complete a Working Draft of the Restoration Flow Guidelines (RFG), to provide a tool to enable the SJRRP to test the measures and processes that will be involved in implementing Restoration Flows prior to commencement of the Restoration Flow Period;
- Reclamation should complete the Seepage Management Plan and begin remediation efforts;
- The SJRRP should collaborate with the non-federal Settling Parties to formulate a coherent, state/federal SJRRP funding strategy to inform the state and Congress of the need for timely funding to support implementation of SJRRP activities consistent with the Settlement and Legislation; and
- Reclamation should work with other Implementing Agencies to formulate Program Assessment Criteria that can be used by the SJRRP and others to measure SJRRP implementation progress during the preceding year.

I recommend that each of the above tasks and work products be clearly identified as “high priority” activities for 2011 that, along with other tasks identified by the SJRRP, would be considered for inclusion as Program Assessment Criteria by the SJRRP for evaluating SJRRP program progress during 2011 and subsequent years.

A brief description of the reason for addressing each of the recommended “high priority” activities is provided in the following discussion.

Complete the One-year SEA and Obtain the SWRCB Permit Necessary to Enable 2012 Interim Flows

Because the Final PEIS/R will not be complete by September 30, 2011, the SJRRP will need to provide additional regulatory compliance for continuation of the Interim Flow releases starting October 1, 2011. To accomplish this compliance, the SJRRP will need to complete the one-year SEA and obtain one-year permits from the SWRCB to avoid an interruption in the Interim Flows. Continued Interim Flow releases are necessary for the orderly implementation of the SJRRP consistent with the Settlement and Legislation and to enable the SJRRP to continue to collect important data needed to inform Restoration Flows and maintain progress toward achieving the Settlement Restoration Goal and Water Management Goal.

Complete the Final PEIS/R

The Draft PEIS/R was completed and distributed for public review April 18, 2011 and the public review period for the Draft PEIS/R recently was extended to September 21, 2011. The SJRRP should give high priority to incorporating comments on the Draft PEIS/R received during the public comment period at the earliest feasible time so that a Final PEIS/R can be available to provide the basis for preparing and process related environmental compliance documents as

soon as possible. It may not be possible to complete the program environmental compliance documentation in 2011 but prioritizing completion of the Final PEIS/R is essential to the credibility and effectiveness of the SJRRP implementation.

Address the RA Request to Study Reoperation of the Chowchilla Bifurcation Structure to Permit Some Interim Flows to Diverted to the Chowchilla Bypass

See the discussion of this issue in Section 2.4.1 of this Report.

Continue to Work with NOAA During the Review of the Reintroduction Permit Application to Prepare for Reintroduction of Spring and/or Fall Run Chinook Salmon in 2012

The Settlement requires the SJRRP to commence reintroducing spring run Chinook salmon December 31, 2012 and NOAA is required to issue a decision on the Reintroduction Permit Application “. . . as expeditiously as possible, but no later than April 30, 2012.” (see Paragraph 14(a) of the Settlement). This means that NOAA’s decision on the Permit Application is due only nine months from the date of this Report. It will require a concerted effort on the part of the Implementing Agencies to support NOAA and USFWS so that the full range of technical/biological and regulatory issues involved in reviewing and issuing a Reintroduction Permit can be addressed within the time available. In addition, the SJRRP should be prepared to take advantage of the availability of juvenile fall run Chinook during 2011 and 2012 to gather information on the ability of Chinook salmon to successfully survive and migrate under current, pre-construction conditions.

Work with Fish Agencies to Enable Adult Fall-run Chinook Salmon Access to Reach 1A Spawning Areas and Use of Hatchery Juveniles for Informational Needs

The SJRRP should be prepared to take advantage of the availability of adult fall-run Chinook salmon that migrate through Hills Ferry Barrier and Sack Dam to the base of Mendota Pool by trapping and hauling adults from the base of Mendota Dam to just above the Chowchilla Bifurcation Structure, then tracking their movement and choice of spawning areas to inform priority spawning areas for future management and rehabilitation. In addition, as was done in spring 2011, the SJRRP should be prepared to take advantage of the availability of juvenile fall run Chinook salmon to gather information on the ability of Chinook salmon to successfully survive and migrate under current, pre-construction conditions. If environmental conditions allow, the fall-run juveniles from both hatchery origin and natural production can contribute towards eventual fall-run reintroduction to the San Joaquin River.

Designate a USFWS Coordinator to Assure Adequate and Timely Consideration of Fish Habitat and Passage Needs During Program Implementation

As discussed in Section 2.3.2 of this Report, the SJRRP Project Teams and FMWG have not adequately integrated the consideration of fish habitat and passage needs into planning for the major Paragraph 11 channel and facility improvements required by the Settlement. The experience of the SJRRP to date regarding Reach 4B/Eastside and Mariposa Bypasses and Reach 2B/Mendota Pool Bypass planning and design efforts has demonstrated the need for a Coordinator to assist in assuring that fish habitat and passage needs receive full and timely consideration by the SJRRP Implementing Agencies and the Specific Project Teams so that past delays and missed opportunities for guidance by the FMWG on biological issues are not

repeated. There is shared responsibility among the Implementing Agencies for the lack of timely consultation on fish habitat and passage issues. Additionally, as discussed in Section 4.5 of this Report, the FMWG and RA/TAC have not communicated effectively with regard to fish habitat and management issues.

As a first step in addressing this need for improved consultation and communication among the SJRRP participants, the USFWS should designate a staff Coordinator that would be responsible for taking the lead to facilitating and managing the coordination of fish habitat and biological considerations with the planning and design of required channel and facility improvements and during preparation of environmental compliance documents by the SJRRP Implementing Agencies and with the Specific Project Teams. The Coordinator also should work closely with the RA and TAC, participate in TAC meetings and work with the RA to facilitate communication and consultation between the TAC and FMWG.

Initiate Planning and Outreach Processes for the Reach 4B/Eastside and Mariposa Bypass Projects

Improvements in Reach 4B/Eastside and Mariposa Bypasses required by Paragraph 11(a) and (b) require the SJRRP to address a particularly challenging set of technical and economic circumstances and difficult project phasing questions in a complex regulatory/legislative setting. Resolution of the questions related to implementing required improvements in these two Reaches will be essential to achieving the Restoration Goal. To successfully address these challenges, the SJRRP should bring together a disparate set of interests in an effort to resolve these challenges based on sound technical, economic and legal grounds. The SJRRP should initiate a planning and outreach process for Reach 4B/Eastside and Mariposa Bypasses that reaches beyond the Implementing Agencies and Settling Parties to involve affected landowners, water districts and local agencies, conservation and other public interest groups.

Complete Initial Interim Flow Monitoring Program Instrumentation

As of the end of 2010 the SJRRP still had not been able to complete necessary installation of planned instrumentation due in large part to landowner resistance to granting temporary access to private lands and/or portions of the river not covered by flow easements. High priority should be given to negotiating access to those private lands still withholding access for surveys and installation of necessary instrumentation so that Interim Flows can be effectively monitored during the remainder of the Interim Flow Period and during the initial phase of the Restoration Flow Period.

Complete the Seepage Management Study

Much of the baseline instrumentation necessary to monitor and collect the data needed to prepare the Seepage Management Study was completed in 2010. However, additional instrumentation is needed and the work of the Seepage Management consultants and Seepage Management Technical Feedback Work Group needs to be completed during 2011.

Prepare a Working Draft of the Restoration Flow Guidelines

This is another carry-over priority from my *2009 RA Annual Report*. The Settlement requires that the SJRRP complete the RFG prior to commencement of Restoration Flows. Implementation of the 2010 Interim Flow Program provided the first opportunity to test and refine the RFG process under real-time conditions. The SJRRP should complete a formal “Draft RFG” document for testing by the SJRRP, Settling Parties and RA. While the SJRRP staff has been working cooperatively with the RA and Settling Parties to test coordinating tasks such as water year forecast updates and real-time flow scheduling measures, it is important that a “working draft” RFG be formally identified by the SJRRP so that it can be updated and refined during 2011, used to guide upcoming Interim Flows, and then used at the commencement of the Restoration Flow Period in 2014 to reflect the experience gained during implementation of Interim Flow releases, including the comments/feedback provided by the RA and Settling Parties.

Formulate a Coherent SJRRP State/Federal Funding Strategy

The SJRRP continues to need a coherent and integrated state/federal joint funding strategy. Such a funding strategy has not been available to date and is needed to address identified and foreseeable SJRRP funding needs in a timely and orderly fashion. It is particularly important to address funding for Phase 1 construction project expenses (see Settlement Paragraph 11) that are projected to peak during FY 2013 and FY 2014 so that these Phase 1 projects can proceed without unnecessary delays. Having a funding strategy at the beginning of the annual budget cycles will inform decision makers on the impact of reduced funding.

Prepare Program Assessment Criteria that Will Enable the SJRRP to Objectively Measure Annual Progress toward Achieving the Settlement Restoration and Water Management Goals

To date, the *SJRRP Annual Reports* have been descriptive documents, summarizing the activities, accomplishments and goals during the prior year and briefly identifying planned activities for the following year. What has been missing is an objective assessment by SJRRP of its progress during the preceding year. It is time, in the fifth year of the SJRRP, for the SJRRP to formulate assessment criteria and to use that criteria to provide an evaluation of progress achieved during the prior year that reflects the requirements of the Settlement and Legislation.

3.2. 2011 SJRRP Challenges

In order to achieve the 2011 goals discussed in Section 3.1 the SJRRP will need to successfully address several challenges that involve downstream landowners and local agencies. These include:

- Completing negotiations with downstream private landowners to obtain Temporary Entry Permits and other forms of access from private landowners that are necessary for SJRRP staff and consultants to be able to enter private lands to conduct essential site surveys and install monitoring equipment;
- Implementing effective real-time monitoring and accounting measures so that Interim Flow management can be adequately documented at all target locations identified in the Settlement;

- Better integrating fish habitat needs and management into planning and design of major infrastructure facilities that must be constructed in order to provide for future Restoration Flows and enable Chinook salmon reintroduction efforts to be fully implemented;
- Continuing consultation with the RA on issues/actions where the RA either is responsible for providing recommendations to the Secretary or the Secretary is responsible for consulting with the RA prior to implementing actions;
- Improving FMWG communication and consultation on fish habitat and passage issues among the Implementing Agencies and providing for timely consultation with the Specific Project Teams and RA/TAC on these issues;
- Implementing a Reach 4B decision process for the RA and fish agencies to concur on routing of spring flows; and
- Continuing efforts to improve consultation by Implementing Agencies (DFG and DWR) and federal liaisons (Reclamation, USFWS and NOAA) with the RA and TAC.

4. ASSESSMENT OF PROGRESS BY THE RA AND TAC

The RA and TAC are assigned responsibilities by the Settlement to assist the Secretary in implementing the Settlement. This section summarizes the roles of the RA and TAC, assesses the RA and TAC performance during 2010, discusses impediments to RA/TAC performance during 2010 and identifies RA goals for 2011.

4.1. Settlement Provisions Relating to the Roles of the RA and TAC

The Settlement identifies the roles of the RA and TAC and addresses the importance of consultation and interaction between the Implementing Agencies and the RA/TAC. In particular, Settlement Paragraphs 9 through 19 describe the interaction between the RA and the Secretary during Settlement implementation.

4.1.1. Required RA Consultation with the TAC

As provided for in the Settlement (Paragraphs 11, 12, 13, 14, 15 and 18, and Settlement Exhibit D Paragraph 11) the RA is required to either submit recommendations to the Secretary or assist the Secretary by consulting on specified actions during Settlement implementation. The RA, whether making recommendations to the Secretary or responding to the Secretary with recommendations during consultation initiated by the Secretary, is required to consult with the TAC. The RA relies on the TAC to assure that comments/recommendations submitted to the Secretary have received appropriate technical review and discussion prior to submittal to the Secretary. The willingness of the state agency members of the TAC to participate fully in the TAC meetings and preparation of draft TAC reports and recommendations is essential to enabling the TAC to provide effective consultation to the RA.

4.1.2. Required Secretary Consultation with the RA

The Settlement also requires the Secretary to consult with the RA prior to implementing the following actions concurrent with the Interim Flow Period although not all actions are considered a part of the Interim Flow Period:

- Completion of the improvements specified in Paragraph 11 (Paragraphs 9 and 11);
- Temporarily increasing, reducing or discontinuing release of water called for in the Exhibit B hydrographs, and resuming releases that would have occurred in the absence of such release modifications (Paragraph 13(e));
- Reintroduction of Chinook salmon at the earliest possible date after commencement of sufficient flows and issuance of necessary permits (Paragraph 14(a));
- Actions by the Secretary if the Secretary decides to decline to follow RA recommendations on reintroduction (also Paragraph 14(b));
- Determination of existing channel capacity and impact of Interim Flows on channel construction work, for the purpose of implementing Interim Flows (Paragraph 15(e)); and
- Development of procedures for coordinating technical assistance, regulatory compliance and sharing of information with other federal or state agencies as well as with the RA and TAC (paragraph 19(a)).

4.2. RA Goals and Activities 2010

The RA is responsible for managing the TAC and engaging in a wide range of activities during 2011 consistent with the terms of the Settlement. These activities included convening TAC meetings and work efforts, preparing recommendations for submittal to the Secretary and consulting with the SJRRP, local and state agencies and outside interests.

4.2.1. RA Goals for 2010

Consistent with the above discussion, the primary RA goals for 2010 focused on achieving the following:

- Directing, managing and facilitating the activities of TAC consistent with the terms of the Settlement;
- Preparing and submitting responses to consultation requested by the Secretary in implementing the Settlement;
- Preparing and updating 2010 Interim Flow Program recommendations;
- Preparing a 2010 RA Annual Report for submittal to the Settling Parties and a Mid-year Report to the Resources Legacy Fund (RLF);
- Providing effective consultation for the PMT, state and local agencies;
- Consulting with the SJRRP with respect to consideration of Reach 4B flow routing options; and
- Reviewing the Monitoring Analysis Plan and Annual Technical Report.

4.2.2. RA Management of TAC Activities

During 2010, I convened a total of twenty (20) TAC meetings, including nine (9) conference call/GoToMeeting web events, a Chinook Reintroduction Workshop and a two-day TAC field trip to the River in May. The complete list and dates of 2010 TAC meetings are discussed in the Section 4.3 summary of TAC activities.

I also spent time consulting with the TAC and reviewing TAC recommendations to me relating to:

- Interim Flow Recommendation and Interim Flow Updates;
- TAC Work Program/Strategic Plan;
- Monitoring and Management; and
- Specific project improvements considered by SJRRP Project Teams when consultation was requested per Settlement Paragraph 11.

4.2.3. RA Reports and Recommendations to the Secretary of the Interior

In accordance with the Settlement, I consulted with the TAC to prepare and submit the following recommendations to the Secretary/SJRRP:

- 2010 Interim Flow Release Recommendations
 - February 1- December 1, 2010 (February 2010)
 - Potential Temporary Reduction of Interim Flows Below Sack Dam (April 30, 2010)

- Interim Flow Schedule for May 1 - December 1, 2010 (April 30, 2010)
- Interim Flow Schedule for May 17 - December 1, 2010 (May 17 2010)
- Interim Flow Schedule for May 28 - December 1, 2010 (May 28, 2010)
- Water Year 2011 Interim Flow Delay (November 1, 2010)
- Revised RA 2010 Fall Pulse Flow Recommendation (November 5, 2010)
- Revised RA 2010 Fall Pulse Flow Recommendation (November 14, 2010)
- RA Transmittal Letter and Updated Recommendation to Evaluate Reoperation of the Chowchilla Bypass Structure for Routing of Interim and Restoration Flows (December 1, 2010)

In addition, I submitted the *2009 RA Annual Report* to the Settling Parties in February 2010 and a *2010 Mid-year Report* to RLF in August 2010.

4.2.4. Consultation Activities

My consultation during 2010 included:

- Participation in Settling Party consultation meetings;
- Weekly conference calls with the SJRRP Program Manager (PM) to discuss Program progress, current activities and emerging or ongoing implementation issues;
- Ongoing participation in meetings that involved the Specific Project Teams;
- Additional SJRRP meetings convened by Reclamation or other Implementing Agencies;
- Participation in meetings convened for the Water Management Group, Restoration Goal Technical Feedback Group and Fish Management Technical Feedback Group;
- Consultation and participation in Restoration Flow Guidelines meetings; and
- Consultation and outreach to other interests involved in or affected by implementation of the SJRRP.

These activities are discussed below.

Ongoing Participation in Settling Party Consultation Meetings

I continued to participate in the monthly Consultation Meetings at the invitation of the federal and non-federal Settling Parties. These meetings addressed policy, funding, coordination and consultation issues confronted during implementation of the Settlement.

Updating the Consultation Agreement

My ability to provide consultation to the Implementing Agencies consistent with the terms of the Settlement continued to be a problem during 2010. As part of an effort to assure that consultation between the Implementation Agencies and RA met the requirements and intent of the Settlement, I initiated discussions with the Settling Parties to address ongoing consultation issues that both the non-federal Settling Parties and I determined were not proceeding consistent with the terms of the Settlement and were impeding my role as the RA. I submitted a memorandum to the SJRRP Program Manager on June 10, 2010, that outlined the factors that were impeding my consultation efforts and this memorandum was discussed with the Settling Parties and Implementing Agencies. Our joint efforts to improve consultation between the Implementing Agencies and RA/TAC led

to modest changes to the consultation agreement that had mixed results. Those changes and the current status of consultation with the Implementing Agencies is discussed in Section 4.5 of this Report (Impediments to the Ability of the RA to Assist the Secretary).

Ongoing Consultation with the PMT and Agencies

During 2010 I regularly consulted with the SJRRP Program Manager, other individual PMT staff and with the Specific Project Teams assigned to manage the specific projects identified in Paragraph 11 of the Settlement. RA consultation in this category included:

- Weekly conference calls with the PM to coordinate RA/TAC/PMT activities and improve RA/TAC awareness of current and emerging implementation issues;
- Participation in bi-weekly Project Team meetings involving implementation of SJRRP improvement projects identified in Paragraph 11 of the Settlement, including
 - Reach 2B and the Mendota Pool Bypass meetings; and
 - Reach 4B/Eastside Bypass/Mariposa Bypass meetings.
- Participation in the bi-weekly Environmental Compliance Work Group meetings (schedule conflicts prevented participation in all meetings);
- Participation in most of monthly Water Management Goal Technical Feedback meetings typically held in conjunction with the monthly FWA Advisory Committee Meetings;
- Participation in the Seepage Management Technical Feedback Group meeting in December;
- Participation in Reach 2B and Reach 4B landowner meetings conducted by the PMT;
- Participation in Scoping Meetings conducted by the PMT staff for the project-specific EIS/R documents relating to Reach 2B/Mendota Pool Bypass and Reach 4B projects; and
- Periodic consultation with individual PMT staff on specific technical issues.

Ongoing Consultation with Outside Organizations

During 2010 the RA consulted with the following groups/organizations that are either impacted by or interested in the implementation of the SJRRP:

- **Resource Management Coalition (RMC)** – The RMC is a coalition of downstream landowners and water agencies that conduct their Board Meeting at the end of most months in Los Banos. I attended Board Meetings by phone or in person when events indicated a need to provide briefings on the status of RA recommendations that were being formulated but not yet transmitted to the Secretary.
- **San Joaquin River Partnership (River Partnership)** – The River Partnership was created in 2010 by a coalition of non-profit organizations interested and involved in efforts to restore the San Joaquin River and to enhance public access to, use and enjoyment of the San Joaquin River. The River Partnership seeks to improve cooperation and coordination among its separate organizations and to identify ways that they can assist agency and other efforts to restore the San Joaquin River. The RA was invited to attend River Partnership meetings and participated in meetings during June and November.

- **Water Education Foundation (WEF)** – For the second year I participated in an October 13/14 WEF tour of the San Joaquin River by providing commentary and responding to questions relating to RA/TAC activities and responsibilities and my view of progress in implementing the SJRRP from the perspective of the RA.

4.2.5. Technical Studies Implemented by the RA and TAC

The RA budget provided by the Memorandum between RLF and DWR/DFG provided for \$40,000 to enable the RA to pursue technical studies that would contribute to achieving the Restoration Goal but that could or would not be funded by or conducted by the SJRRP team or its consultants, or by TAC members. In 2010 the RA did not conduct technical studies that required use of the funding available in the Technical Study component of the RA/TAC budget.

4.3. TAC Activities

4.3.1. TAC Meetings

During 2010, the RA convened the TAC for a total of twenty (20) meetings. These meetings included eleven (11) meetings in person and nine (9) conference call/GoToMeeting events. The twenty TAC meetings also include a Joint SJRRP/TAC Chinook Salmon Reintroduction Workshop (April 27) and a two-day TAC field trip that enabled the TAC to visit several sites along the San Joaquin River (May 18 and 19). Table 3 lists 2010 TAC meeting dates.

Table 3. 2010 TAC conference call and convened meeting dates

| Convened Meetings | Conference Calls |
|--------------------------|-------------------------|
| January 13 & 26 | |
| February 9 | February 24 |
| March 22 | |
| April 27 | April 6 |
| May 18 and 19 | May 26 |
| | June 7 and 28 |
| | July 7 |
| August 24 | |
| September 8 & 22 | |
| October 5 | October 19 |
| November 16 | |
| | December 2 and 9 |

The TAC meetings were convened on a rotating basis in Sacramento, Turlock (CSU Stanislaus), Fresno and San Francisco in an effort to share the traveling burden for TAC members and liaisons.

In addition to convening the TAC for the meetings identified above, I worked on a direct basis with TAC members on a variety of specific issues related to topics that were being considered as part of the TAC meetings and so that I could obtain technical support for RA and TAC participation in technical work group meetings, and my consultation with the SJRRP on other activities and meetings that involved me and were identified in Section 3.

4.3.2. TAC Participation in SJRRP Public Work Group Meetings

During 2010 one or more TAC members participated in the following SJRRP Work Group meetings (Table 4).

Table 4. 2010 SJRRP Work Group meetings

| Meeting Description | Date(s) |
|---|--------------------|
| Restoration Flow Guideline Meetings | May 13 and July 20 |
| Fish Management Technical Feedback Group Mtg | January 21 |
| Restoration Goal Technical Feedback Group Mtg | April 28 |
| Seepage Management Technical Feedback Mtg | December 17 |

4.3.3. TAC Preparation of Recommendations to the RA

During 2010 the TAC prepared and submitted the following reports and recommendations designed to assist the PMT in implementing the Settlement.

- An updated 2010 TAC Strategic Plan in January; and
- Updated TAC Recommendations re: *Priority Information Needs* in October.

In addition, I consulted with the TAC prior to and as part of my finalizing all of my recommendations to the Secretary concerning the Interim Flow Program, studying the reoperation of the Chowchilla Bifurcation Structure, publishing the *2009 RA Annual Report* submitted to the Settling Parties and the 2010 Mid-year Report submitted to RLF.

4.3.4. Departure of TAC Member that Created a Vacant TAC Position

At the end of June 2010, Mr. Ed Solbos resigned his TAC position. His departure left the TAC with five appointed members and one vacant position. This TAC position remained vacant during the remainder of 2010 as the non-federal Settling Parties deliberated on when to appoint a new member and, in discussions with the RA, what expertise would best meet the needs of the TAC during the near future.

4.4. Assessment of RA and TAC Performance During 2010

4.4.1. Assessment Criteria

An assessment of RA and TAC performance during 2010 can reasonably be based on an assessment of how well the RA and TAC succeeded in achieving the five primary goals identified in Section 4.2.1. These goals included.

- RA management and facilitation of TAC activities;
- RA submittal of responses to consultation requested by the Secretary in implementing the Settlement;
- Preparing the 2010 Interim Flow Program recommendations;
- Submitting the 2009 Annual Report to the Settling Parties and the Mid-year Report to the RLF;
- Effectively consulting with the PMT, state and local agencies and interested public organizations and interests; and
- Providing input on the ATR and Management Analysis Plan (MAP).

4.4.2. Assessment of Performance

Based on the above criteria, RA/TAC efforts to achieve the identified goals during 2010 should be considered moderately successful. As discussed below, there were successes during 2010 but there also were areas where the RA should seek to improve RA/TAC efforts during 2011.

RA/TAC Goals that Were Achieved During 2010

RA and TAC efforts during 2010 demonstrated progress toward assisting the Secretary to achieve the Restoration Goal. The RA also consulted with a range of outside persons and organizations that are either affected directly by implementation of the Settlement (*e.g.*, the RMC and River Partnership) or are interested in implementation of the Settlement and achievement of its Restoration and Water Management goals.

RA management and facilitation of TAC activities

I convened the TAC for twenty (20) meetings during 2010. I also managed TAC efforts to assist me in preparation of the work products identified in Section 4.2.3 prior to submitting recommendations to the Secretary.

Consultation with the Program Manager and Reclamation

To the extent permitted by the Implementing Agencies, the RA/TAC consulted with the SJRRP Implementing Agencies. A significant achievement during 2010 was improved consultation between the RA/TAC and the Bureau of Reclamation. As discussed below, consultation with other Implementing Agencies did not match the progress achieved with Reclamation.

Prior to the latter half of 2009, Reclamation was sometimes reluctant to provide access to me and the TAC for early discussion of technical issues. Beginning in the latter portion of 2009 and continuing through 2010 Reclamation incrementally and continued to improve

and expand its willingness to open consultation opportunities to me and TAC. As the Implementing Agencies with the principal responsibility for managing implementation of the SJRRP, Reclamation staff provided a variety of opportunities for me and the TAC to be briefed on emerging issues, participate in agency/consultant meetings convened by Reclamation and provide early consultation on technical issues. Areas where Reclamation increased access and opportunities for early RA/TAC consultation included invitations to participate in:

- Preparation of the Draft Restoration Flow Guidelines;
- Participation in the Water Management Group meetings;
- Participation in the Reach 2B/Mendota Pool Bypass and Reach 4B/Eastside Bypass Project Team meetings; and
- Preparation of the Draft ATR and MAP documents.

In 2009 the RA and SJRRP PM agreed that they would re-evaluate progress on consultation issues and report to the Settling Parties on the progress made in improving consultation. Although not all concerns with respect to consultation issues were resolved by the Program Manager and the RA (see the discussion of “Impediments” in Section 4.5.1), the improvement in consultation were significant. Reclamation continues to explore additional opportunities for early consultation with the RA/TAC and has encouraged the RA to expand consultation and coordination with other Implementing Agencies.

RA Interim Flow Recommendation for February 1 to December 1, 2010

Recommendations for the 2010 Interim Flow Program covered the entire period from October 1, 2009 through December 1, 2010. My Interim Flow Program recommendations were submitted to the Secretary on January 20, 2010, in time for review and action by the Secretary prior to the Interim Flow releases that were scheduled to commence February 1, 2010. In addition, changes in hydrology during the spring months warranted additional release schedule adjustments (as shown in Section 4.3.2) that were timely and were approved for implementation by Reclamation.

RA Submittal of the 2009 Annual Report to the Settling Parties and submittal of the Mid-year Report to RLF

The *2009 RA Annual Report* was submitted to the Settling Parties in April 2010 and the Mid-year Report was submitted to RLF in August 2010.

RA/TAC Goals that Were Not Fully Achieved During 2010

There are specific areas where the RA and TAC either did not achieve a primary goal or where it was only partially successful in achieving their goal. These areas are discussed below.

FMWG Consultation with the RA

Despite the improvements in consultation and communication between the RA/TAC and Reclamation, and despite considerable effort involving the non-federal Settling Parties, Program Manager, me and others during 2010, the ability of the RA/TAC to consult with the FMWG early on technical issues relating to the Fish Management Plan and fisheries management issues in general lagged during 2010 (see the discussion in Section 4.5.1).

Limited TAC Productivity

The resignation of a TAC member at the end of June 2010 and the limited time availability of other TAC members reduced the TAC's ability to undertake technical analyses and provide technical consultation to the SJRRP during 2010. This is an issue that needs to be addressed during 2011.

4.5. Impediments to the Ability of the RA to Assist the Secretary

My 2009 RA Annual Report identified a number of factors that impeded my ability to assist the Secretary in the manner set forth in the Settlement. Many of these impeding factors continued to be an issue during 2010, and are discussed below.

4.5.1. Continued Implementing Agency Restrictions on Consultation with the RA and TAC

In June 2010 I submitted a memorandum to the SJRRP Program Manager wherein I addressed the continuing need to improve consultation efforts between the Implementing Agencies and the RA/TAC. In my June 10, 2010 memorandum, I identified several factors as indicators of the limited effectiveness of then current consultation practices. These factors included the inability of the TAC to review draft SJRRP technical memoranda or other draft documents prior to public distribution and the inability of the RA to participate in Program Management Team meetings where the lead agency staff meets to address current issues relating to implementing the Settlement.

As noted in Section 4.4.2 the Program Manager and Reclamation staff significantly improved their efforts to consult with and seek consultation of the RA and TAC during 2010, regularly inviting me and individual TAC members to participate in technical meetings convened by Reclamation staff.

However, the RA, TAC and non-federal Settling Parties are still struggling to achieve effective consultation with the FMWG and to have access to technical discussions conducted by the FMWG prior to the time subsequent work products become available for public review. To enable the RA to improve consultation to the SJRRP and Secretary on fish management issues, there is a need for the SJRRP to provide a means by which information is shared and consultation occurs with the RA, TAC and the Settling Parties in the developmental stages of the product development.

4.5.2. Inconsistent Agency Participation in TAC Meetings and Consultation on TAC Work Products

Implementing Agency participation in TAC meetings and preparation of TAC/RA work products was cited as an impediment to the ability of the RA to provide effective consultation to the Secretary in my 2009 RA Annual Report. During 2010 I initiated a number of changes to the organization and planning for TAC meetings in response to some of the agency comments received when I discussed their participation in TAC meetings with them. These changes included eliminating agency update reports, general "process" and Settlement implementation

discussions that tended to arise during meetings but that did not focus on technical issues relating to implementation of the Restoration Goal of the Settlement. As a result, the TAC meetings focused more on technical discussions.

Those changes in the TAC meetings seemed to have marginally improved agency participation in the TAC meetings but a number of factors continued to affect agency participation and consultation. These factors included:

- The ongoing state budget crisis and general SJRRP workload impact on DFG and DWR in person attendance at the TAC meetings;
- As noted in Section 4.5.1, a reluctance by FMWG participants to share staff thoughts and insights on technical issues prior to the time when there is a consensus opinion on the technical issue among the FMWG agency staff;
- Assignment by the fish agencies of TAC representatives that were not the same staff serving on the FMWG, meaning that it was common for agency representatives at the TAC to have no direct knowledge about what was being discussed at the FMWG meetings when technical questions arose at during TAC meetings;
- A feeling on the part of agencies that sufficient internal staff expertise was present to address SJRRP challenges and, given the limited agency resources (staff time and funding) and extremely tight SJRRP schedule milestones, the agency could not afford to “divert” staff resources to review/respond to draft TAC recommendations because it would not be a good use of agency resources.

These issues will continue to be addressed in 2011.

5. 2011 RA AND TAC GOALS

In 2011, the RA intends to focus on the following goals and actions to assist the Secretary in implementing the Settlement. These RA goals for 2011 are designed to assist in achieving SJRRP goals and to address impediments to progress toward achieving the Restoration Goal that were encountered during 2010 as discussed in this document.

The 2011 RA and TAC goals include:

- Effective RA management of TAC activities;
- Improving the RA ability to provide timely consultation and recommendations to the PMT and Secretary, consistent with the terms of the Settlement, Legislation and applicable regulatory permits;
- Restoring the technical support capabilities of the TAC by working with the Settling Parties to fill the TAC vacancy created by the resignation of Ed Solbos;
- Improving RA ability to provide timely technical consultation and recommendations to the Secretary by continuing the progress in working with Reclamation and enhancing access to and consultation with the fisheries management agencies on the FMWG;
- Continuing RA participation in the SJRRP Project Team meetings to stay current with SJRRP activities/progress and, where feasible, provide early input to the SJRRP staff concerning emerging issues and questions of concern to the RA and TAC;
- Continuing TAC and RA participation in SJRRP Public Work Group technical feedback meetings and encourage SJRRP staff to provide more frequent technical feedback opportunities;
- Providing timely technical support for preparation of the Annual Technical Report (ATR) and Monitoring and Analysis Plan (MAP) that will be prepared by SJRRP staff;
- Providing timely RA recommendations for implementing the Interim Flow releases during the remainder of 2011;
- Preparing RA recommendations for the 2012 Interim Flow releases in accordance with SJRRP staff needs;
- Implementing real-time Interim Flow management in an attempt to achieve quantitative management targets in downstream Reaches;
- Increasing TAC productivity by filling vacancies and seeking ways to obtain additional time from TAC members;
- Preparing monitoring recommendations for 2012 Interim Flows;
- Reviewing and commenting on the Draft PEIS/R;
- Evaluating performance of certain predictive models (water temperature) for 2010 and 2011 Interim Flow releases;
- Working with the SJRRP PM and others to achieve closure on my request to study the reoperation of the Chowchilla Bifurcation Structure; and
- Continuing RA consultation, as appropriate and productive, with local agencies, state and federal agencies, downstream landowners and water managers, and public interest organizations to assist the SJRRP in facilitating stakeholder and public understanding of the SJRRP program.

6. ADDITIONAL MEASURES RECOMMENDED TO ENHANCE THE PROSPECTS FOR ACHIEVING THE RESTORATION GOAL

Settlement Paragraph 12 acknowledges that “. . . there are likely additional channel or structural improvements . . . that may further enhance of achieving the Restoration Goal.” Paragraph 12 also requires the RA to identify such additional measures in recommendations to the Secretary in order to enhance the prospects for achieving the Restoration Goal. Based on the experience gained to date and considering the immediate challenges that must be addressed by the SJRRP, I am not recommending additional measures for consideration by the Secretary/SJRRP beyond the Chowchilla Bifurcation Structure reoperation evaluation request.

7. TAC AND RA EXPENDITURES

The RA and TAC continue to operate under the oversight of the Resources Legacy Fund (RLF) pursuant to the terms of a May 25, 2007, Grant Agreement (2007 Agreement) between the State (DWR and DFG) and RLF. A total of \$1,950,000 was provided for RA/TAC operations under the Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Act of 2000. The RLF administers funding for RA and TAC and contracts with the RA and TAC members. RA/TAC contracts were to expire June 30, 2010; however, RLF received a “time-only” extension from DWR/DFG that enables remaining funds to be used through December 31, 2010. As of December 31, all of the \$1,950,000 in funding had been provided to RLF by DWR/DFG.

At the end of 2010 all of the \$1,950,000 of the state committed funding had been transferred to RLF by DWR and DFG. The final grant payment by DFG was due April 2009 and was finally received by RLF in November 2010. Of the \$1,950,000 transferred to RLF to support the RA and TAC, a total of \$1,481,223.58 has been expended to pay for RA and TAC activities and RLF Administrative costs (\$120,000) through 2010. During 2010, RA and TAC expenditures totaled \$451,951.53 (see Table 1). Therefore, on December 31, 2010, \$343,776.42 was available to support RA and TAC activities during 2011.

A new Agreement between DWR and RLF was signed by DWR and RLF to continue funding RA/TAC activities when all funding provided by the 2007 DWR/DFG/RLF Agreement was expended in early in 2011. The DWR/RLF Agreement provides for \$1,000,000 to fund RA and TAC activities in five (5) installments of \$200,000 commencing in 2011. The first installment payment from DWR already has been received by RLF. It is expected that the \$1,000,000 provided by DWR will be sufficient to fund the RA/TAC through at December 31, 2012.

Table 5. 2010 RA and TAC expenditures between January 1 and December 31, 2010.

| 2010 RA AND TAC EXPENDITURES | |
|---|----------------------|
| (January 1 - December 31, 2010) | |
| Restoration Administrator Account | |
| R.J. Meade Consulting, Inc. | |
| Salary | \$ 233,600.00 |
| Expenses | <u>\$ 17,350.72</u> |
| SUBTOTAL | \$ 250,950.72 |
| Technical Assistance | ----- |
| Miscellaneous* | <u>\$ 1,463.14</u> |
| 2010 RA Account Total | \$ 252,413.86 |
| Technical Advisory Committee Account | |
| Friant Water Authority | |
| Salary | \$ 27,918.00 |
| Expenses | <u>\$ 1,760.47</u> |
| SUBTOTAL | \$ 29,678.47 |
| Hanson Environmental, Inc. | |
| Salary | \$ 37,912.50 |
| Expenses | <u>\$ 1,275.00</u> |
| SUBTOTAL | \$ 39,187.50 |
| McBain & Trush, Inc. | |
| Salary | \$ 58,270.50 |
| Expenses | <u>\$ 11,398.81</u> |
| SUBTOTAL | \$ 69,669.31 |
| Peter Moyle | |
| Salary | \$ 9,812.50 |
| Expenses | <u>\$ 467.50</u> |
| SUBTOTAL | \$ 10,280.00 |
| Natural Resources Defense Council | |
| Salary | \$ 32,280.00 |
| Expenses | <u>\$ 1,201.48</u> |
| SUBTOTAL | \$ 33,481.48 |
| Ed Solbos | |
| Salary | \$ 14,937.50 |
| Expenses | <u>\$ 2,303.41</u> |
| SUBTOTAL | \$ 17,240.91 |
| 2010 TAC Account Total | \$ 199,537.67 |
| Total RA and TAC Accounts | \$ 451,951.53 |

*Miscellaneous includes TAC meeting expenses and conference call costs.

ATTACHMENT 1
AUGUST 16, 2009 TRANSMITTAL LETTER AND
RA RECOMMENDATION REPORT

***San Joaquin River Restoration Program
Restoration Administrator***

August 16, 2009

Mr. Jason Phillips
Program Manager, SJRRP
Bureau of Reclamation
Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, California 95825-1898

Subject: Restoration Administrator Recommendation to Evaluate the Reoperation of the Chowchilla Bypass to Permit Routing of Interim Flows and Restoration Flows to the Chowchilla Bypass for Water Year 2011 and Beyond

Dear Mr. Phillips:

As a follow up to our recent conversations and my consultation with the SJRRP Technical Advisory Committee, I am forwarding the attached recommendation to initiate an evaluation of reoperating the Chowchilla Bifurcation Structure to permit routing of Interim and Restoration Flows through both Reach 2A and the Chowchilla Bypass. As discussed with you recently, and following consultation with the Technical Advisory Committee, I am recommending this analysis in accordance with the provisions of Paragraph 12 of the Settlement Agreement in an effort to enhance the prospects for achieving the Restoration Goal of the Settlement. Paragraph 12 of the Settlement acknowledges that “. . . there are likely additional channel or structural improvements . . . that may further enhance achieving the Restoration Goal . . .” and directs the Restoration Administrator to “. . . identify and recommend to the Secretary such additional measures.” I am enclosing a “Recommendation Report” that explains the need for the recommended analysis (see Enclosure) and why this evaluation should occur as soon as possible as part of the SJRRP Draft PEIS/R that currently is being prepared.

As the Restoration Administrator I am responsible for assisting the Secretary in implementing the Settlement and, specifically, for assisting in achieving the Settlement’s Restoration Goal. For the reasons discussed in the enclosed Recommendation Report, I have concluded that an evaluation of the pros and cons of operating the Bifurcation Structure to allow Interim and Restoration Flows to be routed through the Chowchilla Bypass should be conducted to contribute to enhancing achievement of the Restoration Goal.

I recognize that this recommendation has environmental, operational and cost implications with respect to the overall SJRRP. I also understand that downstream users and landowners and other interests may have legitimate concerns about pursuing such an option. Therefore, I am not recommending reoperating the Bifurcation Structure as part of WY 2010 Interim Flows; nor am I recommending that Interim and Restoration Flows be routed through the Bypass in subsequent years without first conducting a thorough evaluation of this recommendation.

***San Joaquin River Restoration Program
Restoration Administrator***

Continued, Page 2
August 16, 2009

I look forward to discussing this issue with you at your early convenience and I fully expect that this matter will be discussed among a broad range of interests, including representatives of downstream water users and landowners. Thank you for your consideration.

Best regards,

Roderick J. Meade, Jr.
SJRRP Restoration Administrator

Enclosure: Recommendation Report

cc: Mr. Monty Schmitt
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Mr. William Luce
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Ms. Paula Landis
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*Recommendation to Evaluate Reoperation of the Chowchilla
Bypass Structure for Routing of Interim and Restoration Flows*

*Restoration Administrator
August 16, 2009*

RA Recommendation Report

RECOMMENDATION

Based on consultation with the Technical Advisory Committee (TAC) the Restoration Administrator (RA) recommends that, as part of the Programmatic Environmental Impact Statement/Report (PEIS/R) for the San Joaquin River Restoration Program (SJRRP), the Secretary evaluate the potential for reoperating the Chowchilla Bifurcation Structure to allow for routing of Interim Flows and Restoration Flows to both Reach 2B and to the Chowchilla Bypass. Such reoperation of the Bifurcation Structure would not occur until completion of the recommended reoperation evaluation. If determined to be desirable and feasible, reoperation could occur as early as WY 2011 and could continue at least until Reach 2B and Mendota Pool Bypass improvements are completed and operational. This RA recommendation does not apply to WY 2010 and should not impact approval/certification of the EA/IS/FONSI/MND for WY 2010 Interim Flows.

The recommended evaluation should include assessment of the restoration benefits that could be achieved, potential environmental and operational impacts to downstream water users and landowners, feasible mitigation measures for identified impacts, and the costs and sources of funding associated with allowing future Interim and Restoration Flow releases from Friant Dam to enter the Chowchilla Bypass.

BACKGROUND

The Settlement identifies a number of required improvements and measures that are considered necessary to achieve the Settlement's Water Management Goal and Restoration Goal. Paragraph 11 of the Settlement identifies these improvements, including specified improvements to channel capacity, creation of a bypass around the Mendota Pool, structural improvements to existing headgates, the Chowchilla Bifurcation Structure and other structures. The Settlement does not identify or discuss the routing of Interim Flows or Restoration Flows through the Chowchilla Bypass although it is understood that the Chowchilla Bypass will conduct flood flows as necessary and that these flows would convey both juvenile and adult Spring run salmon via the Chowchilla Bypass.

The Settlement declares that the Secretary “. . . shall begin a program of interim flows which will include releases of additional water from Friant Dam commencing no later than October 1, 2009, and continuing until full Restoration Flows begin (Settlement Paragraph 15).” The Restoration Administrator is assigned the task of formulating and recommending to the Secretary a program of Interim Flows “. . . in order to collect relevant data concerning flows, temperatures, fish needs, seepage losses, recirculation, recapture and reuse . . . to the extent that such flows would not impede or delay completion of the measures specified in Paragraph 11(a), or exceed existing downstream channel capacities (Paragraph 15).”

*Recommendation to Evaluate Reoperation of the Chowchilla
Bypass Structure for Routing of Interim and Restoration Flows*

*Restoration Administrator
August 16, 2009*

As SJRRP implementation planning and environmental review have progressed, the downstream water users and landowners have identified a lengthy list of concerns that, when addressed, could serve to reduce future Interim Flows downstream of the Chowchilla Bifurcation Structure. The combined issues identified by downstream water users and landowners include, but are not limited to:

- Concerns about the difference between estimated channel capacities in Reaches 2B and 3 and the Arroyo Canal and “experienced” capacities indicated by historic responses to flow conditions;
- Seepage impacts related to Interim Flows in Reaches 2B and 3;
- Operational and capacity concerns regarding the impact of Interim Flows on managing elevations in Mendota Pool and semi-annual dewatering of the Pool for dam inspection;
- Operational issues related to the Mendota Dam gates;
- Operational issues related to the real-time management of Interim Flows;
- Concerns regarding the adequacy of funding to complete the required reach 2B and Mendota Pool Bypass; and
- Concerns that completion of required improvements to Reach 2B and the Mendota Pool Bypass will be delayed.

REASONS FOR THE RECOMMENDATION

The Restoration Administrator takes the comments and concerns of the downstream water users and landowners and others very seriously. If the available information cannot demonstrate that the cited concerns can be avoided or mitigated to an acceptable level under the EA/IS for WY 2010 and the overall SJRRP Draft PEIS/R documents, the RA is recommending that the SJRRP be prepared to explore alternatives to the existing flow routing model that could relieve pressures downstream of the Chowchilla Bifurcation Structure on Reaches 2B, the Mendota Pool and Dam, Reach 3 and the Arroyo Canal.

The cumulative potential constraints on future Interim Flows under the existing flow routing program have increased to a point where the RA and TAC are not sure what level of Interim Flow releases will be permitted, whether the permitted additional release of water from Friant Dam allocated for Interim Flows will be adequate to successfully achieve the purposes of the Interim Program under Paragraph 15 of the Settlement, and when relief from these constraints will be available. The issues/concerns identified above could persist at least until the improvements to Reach 2B and the Mendota Pool Bypass are completed and become operational. These critical improvements are scheduled for 2013 in the Settlement; however, the effects of the two-year delay in achieving approval of the SJR Act and other factors could significantly extend the time needed to complete these improvements. Thus, both Interim Flows and Restoration Flows could be impacted for many years by these issues due to conditions downstream of the Bifurcation Structure.

*Recommendation to Evaluate Reoperation of the Chowchilla
Bypass Structure for Routing of Interim and Restoration Flows*

*Restoration Administrator
August 16, 2009*

One approach to relieving pressure on channels, facilities, water users and landowners downstream of the Bifurcation Structure is to allow the Bifurcation Structure to be able to route a portion of the Interim Flow releases reaching the downstream limit of Reach 2A to the Chowchilla Bypass. Under this approach, when the magnitude or duration of Interim Flow releases from Friant Dam threaten to induce adverse impacts downstream of the Bifurcation Structure, a portion of the Interim Flows leaving Reach 2A could be diverted to the Chowchilla Bypass. In this way, Reaches 1 and 2A could sustain greater flow magnitudes and a more robust set of experiments, data collection and analyses could be performed upstream of the Bifurcation Structure. This capability could significantly enhance achieving the Restoration Goal by providing earlier and more valuable data and insight into how to implement Restoration Flows. Further, if the Mendota Pool Bypass and Reach 2B improvements required by the Settlement in Paragraph 11 are delayed, the increased flexibility gained in terms of higher water releases from Friant Dam for Interim Flows and the for early phases of Restoration Flows that precede completion of the Reach 2B/Mendota Pool Bypass improvements will enable the overall SJRRP to avoid falling farther behind the Settlement Milestone/Schedule.

If, on the other hand, the existing flow routing model is unchanged and there is no effective response to the potential (thus foreseeable) constraints related to the concerns of downstream water users and landowners, both the Interim Flows and early phases of Restoration Flows could be reduced to a point where: (a) the collection and monitoring of data relating to flows, temperatures, fish needs, seepage and recirculation, recapture and reuse of water could be compromised significantly and may not adequately inform planning for future Restoration Flows at the magnitudes and durations anticipated; (b) the reintroduction of Chinook salmon scheduled for 2012 could be delayed; and (c) achieving a spring run Chinook salmon population in good condition also could be delayed.

The Settlement acknowledges in Paragraph 12 that “. . . there are likely additional channel or structural improvements . . . that may further enhance the success of achieving the Restoration Goal.” The Settlement further declares that, to enhance the success of achieving the Restoration Goal, the Restoration Administrator “. . . shall identify and recommend to the Secretary such additional improvements and potential measures . . .” to further enhance achieving the Restoration Goal.

Facing the circumstances discussed above, the Restoration Administrator has an obligation under the provisions of Paragraph 12 of the Settlement to recommend measures that could enable water releases from Friant Dam consistent with the Settlement hydrographs to serve Reaches 1 and 2A above the Bifurcation Structure so that a robust program of interim research and releases could be implemented and enhance the prospects for achieving the Restoration Goal. Among the scientists on the Technical Advisory Committee (TAC), there is agreement that the potential reductions in the Interim Flow release magnitudes and duration pose a significant challenge to the SJRRP’s ability to collect the range and quality of data on temperatures, fish needs, sand and gravel transport needed to plan effectively for commencement and long-term implementation of Restoration Flows.

*Recommendation to Evaluate Reoperation of the Chowchilla
Bypass Structure for Routing of Interim and Restoration Flows*

*Restoration Administrator
August 16, 2009*

After considering the number of concerns/issues that could impact Interim Flows, the Restoration Administrator is recommending that the Secretary evaluate the potential to reoperate the Chowchilla Bifurcation Structure to enable the Chowchilla Bypass to conduct Interim Flows.

EXPECTED RESTORATION BENEFITS

Seepage and operation constraints in Reach 2B and Mendota Dam limit Interim Flows to 1,300 cfs at the Chowchilla Bifurcation Structure (based on a release of 1,660 cfs at Friant Dam). The primary benefit related to reoperating the Chowchilla Bifurcation Structure to enable portions of Interim Flow water releases from Friant Dam is the ability to release water for Interim Flows at magnitudes greater than the maximum flows now contemplated in the EA/IS for WY 2010.

The ability to accommodate increased Interim Flow releases above the Bifurcation Structure could enhance the ability to monitor and analyze several important restoration criteria, including:

- Gravel bed mobility thresholds;
- Coarse sediment transport rates and spawning gravel augmentation needs;
- Fine sediment (sand) transport rates;
- Calibration of the 1-D and 2-D hydraulic models that will used during SJRRP implementation;
- Identification of floodplain inundation thresholds;
- Calibration of the water temperature model for spring high-flow releases, thus contributing to determining whether we can provide suitable juvenile salmon outmigration temperatures in April and May; and
- Calibration of the water temperature model for higher-flow releases.

In the absence of routing capability via the Chowchilla Bypass for planned Interim Flows, opportunistic monitoring of flood releases during the Interim Flow period could be conducted. However, these opportunistic monitoring efforts would be subject the following potential drawbacks:

- Little or no experimental control over the Friant Dam water releases with priority to flood management over experimental objectives;
- Inability to provide for steady flow as at a desired magnitude for experiments relating to priority information needs;
- Severe challenges to staff for planning (inadequate time and low priority) and conducting complex field work/monitoring during flood control releases; and
- No assurance that flood control releases will occur during Interim Flow period.

*Recommendation to Evaluate Reoperation of the Chowchilla
Bypass Structure for Routing of Interim and Restoration Flows*

*Restoration Administrator
August 16, 2009*

**CONCLUSION: AN ASSESSMENT OF THE BENEFITS OF REOPERATING THE CHOWCHILLA
BIFURCATION STRUCTURE SHOULD BE INCLUDED AS PART OF THE DRAFT SJRRP PEIS/R**

The RA recommendation to consider reoperating the Chowchilla Bifurcation Structure to allow water releases for Interim Flows and Restoration Flows down the Chowchilla Bypass prior to completion of the Reach 2B and Mendota Pool Bypass improvements should be addressed in the Draft PEIS/R for the SJRRP is being prepared for public distribution.

The benefits of implementing the RA Recommendation include:

- Avoiding the need to conduct a separate and more time consuming independent environmental review of this additional measure;
- Expediting identification of potential environmental and operational impacts and costs associated with reoperation of the Bifurcation Structure and use of the Bypass;
- Confirming/clarifying the benefits of reoperation;
- Identifying the full range of permits, approvals and agreements that would be required to implement reoperation;
- Potentially expediting implementation of the reoperated Bifurcation Structure, thereby expediting the collection and analysis of higher quality data that would inform Restoration Flows decisions; and
- If reoperation of the Bifurcation Structure is rejected, then the evaluation would provide a venue for identifying other potentially feasible approaches capable of addressing the concerns set forth in this RA Recommendation.

Finally, the Interim Flows volumes will vary according to the kind of water year that is experienced. It is important to reduce, if possible, the number of variables that must be contended with in planning for the collection and analysis of data during these flows. The ability to know that “potential” or unforeseen downstream impacts associated with seepage, channel or levee issues and operation of the Mendota Pool and Dam would not preclude or suddenly cause Interim Flows to be reduced would be a significant benefit to the design and implementation of both the Interim Flow Program and the early Restoration Flows until the Mendota Pool Bypass and Reach 2B improvements are completed and operational.

ATTACHMENT 2
OCTOBER 27, 2010 EMAIL FROM JASON PHILLIPS

Hi Rod,

As we recently discussed, the Settling Parties recently discussed the subject topic. The proposed action items for moving forward are as follows:

1. I provide information to the you on agency studies that are either already on-going or are anticipated to be initiated in the near future regarding flows in the Chowchilla Bypass. This information is below.

List of studies or information that are available, in-progress, or planned for the Chowchilla Bypass:

Anticipated requirements for the reintroduction permit and/or the implementation of future fisheries management:

- No studies are specifically called out in the application for the permit and it has not been determined if further studies are required

Studies recommended or actively being pursued by the FMWG:

- Juvenile survival study for telemetered fall-run Chinook (proposed)
- FMWG preparation of qualitative assessment of viability of fish utilization in Chowchilla Bypass technical memorandum (tentative completion by end of FY 2011)
- Historical utilization of the Chowchilla Bypass (FMWG would like to request from flood agencies)

Studies recommended or actively being pursued by DWR Flood (for NULE):

- Geomorphic assessment report – Rates levees on a qualitative basis (completed)
- Levee drilling program – Borings taken at ~1,000 foot spacing on crest and 1 mile spacing at toe (drilling for Chowchilla right bank complete, analysis to be completed next year)

Hydrology and hydraulics analysis (DWR, in progress)

2. You take information from #1 above to the TAC for discussion and the agencies can elaborate to the extent needed on the on-going studies.
3. You provide an update to your August 16th, 2009 recommendation regarding the subject topic.

Thanks,
Jason

Jason Phillips
U.S. Bureau of Reclamation
SJRRP Program Manager
(916) 978-5456
jphillips@usbr.gov

ATTACHMENT 3
DECEMBER 1, 2010 UPDATED RA TRANSMITTAL LETTER AND
RA RECOMMENDATION REPORT

San Joaquin River Restoration Program Restoration Administrator

Memorandum

Date: December 1, 2010

To: Jason Phillips – SJRRP Program Manager cc. Bill Luce, Monty Schmitt

From: Rod Meade

Subject: Updated RA Recommendation to Evaluate Reoperation of the Chowchilla Bifurcation Structure to Enable Interim Flows to be Routed to the Chowchilla Bypass

On October 27, 2010, you requested that I update my August 16, 2009 RA Recommendation to study the potential benefits and impacts associated with reoperating the Chowchilla Bifurcation Structure. The purpose of my August 2009 study recommendation was to study routing Interim Flows and Restoration Flows through the Chowchilla Bypass. My 2009 RA Recommendation discussed the benefits that could be realized if flows could use the Chowchilla Bypass.

In response to your request, I conducted a review of my earlier RA Recommendation. The resulting Updated RA Recommendation Report (see Attachment) is submitted for your consideration by this transmittal. The Updated RA Recommendation affirms my August 2009 Recommendation to study the benefits of reoperating the Chowchilla Bifurcation Structure. As explained in my attached Report, I believe there now is a more compelling case for initiating a study of the reoperation of the Bifurcation Structure and use of Chowchilla Bypass than when I submitted my initial RA Recommendation in 2009. Accordingly, I am requesting that you to initiate the recommended Chowchilla Bifurcation Structure reoperation study as soon as possible.

Thank you for your consideration. I look forward to discussing this matter with you, the non-federal Settling Parties and other appropriate interests at your early convenience.

Attachment: Updated RA Recommendation Report

Updated RA Recommendation to Evaluate Reoperation of the Chowchilla Bypass Structure for Routing of Interim and Restoration Flows

*Restoration Administrator
December 1, 2010*

Updated RA Recommendation Report

Executive Summary

In response to the recent request by the SJRRP Program Manager I am updating my August 16, 2009 RA Recommendation to study the reoperation of the Chowchilla Bifurcation Structure to allow SJRRP Interim Flows and Restoration Flows to enter the Chowchilla Bypass. The study recommended in August 2009 was intended to enable the SJRRP to assess the benefits and issues related to allow San Joaquin River Interim Flows and Restoration Flows to enter the Chowchilla Bypass. Based on my analysis of current conditions, I continue to recommend investigating the benefits/impacts associated with reoperation of the Chowchilla Bifurcation Structure. Further, for the reasons set forth below and discussed in this Report, I believe that the need to consider allowing the Chowchilla Bypass to convey Interim Flows and Restoration Flows as become even more pressing for the following reasons:

- Channel capacity constraints identified in my August 2009 RA Recommendation continue to constrain the release of higher spring flow pulses that are essential for understanding existing fish habitat including spawning gravel mobilization flows and mobilization flows in relation to temperatures;
- Downstream channel capacity constraints in reach 2B and Reach 4A have become even more problematic and, based on recent experiences, additional Interim Flow restrictions in Reaches 2B and 4A may further impact the collection of data critical to the reintroduction of salmon;
- Past and ongoing SJRRP delays in completing the PEIS/R and major project improvements in Reach 2B and 4B indicate that the channel conveyance capacity and structural improvements necessary to convey the full Restoration Flows scheduled to commence January 1, 2014, will not be complete;
- The ongoing delay in completing the PEIR/S and the anticipated delays in completing the major project improvements in Reaches 2B and 4B, in combination with the increasing flow restrictions in Reach 4A, indicate that routing Interim and Restoration Flows down the Chowchilla Bypass may be the most effective means of achieving the Interim Flows and Restoration Flow release targets for Friant Dam;
- Starting at the end of 2012, the ability to direct Interim Flows and Restoration Flows down the Chowchilla Bypass also may provide the most appropriate means of routing the reintroduced juvenile salmon downstream required by the settlement by the end of 2012; and
- Finally, during future flood events, Chinook salmon reintroduced after 2012 likely will be pushed down into the Chowchilla Bypass by flood flows and, given the likely presence of reintroduced Chinook salmon in the Chowchilla Bypass, it appears to be prudent to consider Interim and Restoration Flow routing options that could contribute to survival of these salmon.

Therefore, I continue to recommend studying reoperation of the Chowchilla Bifurcation Structure. I also recommend that this study be initiated and completed as soon as possible.

Updated RA Recommendation to Evaluate Reoperation of the Chowchilla Bypass Structure for Routing of Interim and Restoration Flows

*Restoration Administrator
December 1, 2010*

Background

On October 27, 2010, the SJRRP Program Manager requested an update of my August 16, 2009 RA Recommendation calling for the SJRRP to study the potential benefits associated with reoperating the Chowchilla Bifurcation Structure to enable Interim Flows in the Chowchilla Bypass. The requested RA Recommendation update identified three components that would be part of the updating process, including:

1. The SJRRP Program Manager would provide the RA with ongoing or anticipated agency studies regarding flows in the Chowchilla Bypass;
2. The RA would consider the information included in the agency studies and consult with the TAC; and
3. The RA would provide the SJRRP Program Manager with an updated RA Recommendation.

This Updated RA Recommendation is provided below following a discussion of the information and factors considered by the RA and TAC.

The August 2009 RA Recommendation

In August of 2009 I recommended the following action with regard to reoperating the Chowchilla Bifurcation Structure:

Based on consultation with the Technical Advisory Committee (TAC) the Restoration Administrator (RA) recommends that, as part of the Programmatic Environmental Impact Statement/Report (PEIS/R) for the San Joaquin River Restoration Program (SJRRP), the Secretary evaluate the potential for reoperating the Chowchilla Bifurcation Structure to allow for routing of Interim Flows and Restoration Flows to both Reach 2B and to the Chowchilla Bypass. Such reoperation of the Bifurcation Structure would not occur until completion of the recommended reoperation evaluation. If determined to be desirable and feasible, reoperation could occur as early as WY 2011 and could continue at least until Reach 2B and Mendota Pool Bypass improvements are completed and operational. This RA recommendation does not apply to WY 2010 and should not impact approval/certification of the EA/IS/FONSI/MND for WY 2010 Interim Flows.

The recommended evaluation should include assessment of the restoration benefits that could be achieved, potential environmental and operational impacts to downstream water users and landowners, feasible mitigation measures for identified impacts, and the costs and sources of funding associated with allowing future Interim and Restoration Flow releases from Friant Dam to enter the Chowchilla Bypass.

Updated RA Recommendation to Evaluate Reoperation of the Chowchilla Bypass Structure for Routing of Interim and Restoration Flows

*Restoration Administrator
December 1, 2010*

Agency Studies that Provide New Information Relating to Potential Water Flows in the Chowchilla Bypass

As noted in your email and confirmed during my follow up discussions with Reclamation and DWR staff, no current agency studies address water flows in the Chowchilla Bypass. The Final Agency Plan released last week (November 19) does not include studies that would address potential water flows in the Chowchilla Bypass and, as pointed out in your email, the spring run Chinook reintroduction permit application does not call out studies involving flows in the Chowchilla Bypass and the FMWG has not determined the need for such studies.

There are a few studies either underway or proposed that could address water flows in the Chowchilla Bypass. The DWR has completed its Geomorphic Assessment Report (qualitative rating of levee) but it will not be finalized and results will not be available until early in 2011. DWR's levee drilling program will address the right bank of the Chowchilla Bypass but it will not be completed until next year. Also, it is my understanding that DWR's hydraulics and hydrology analysis, while currently underway, will not address the Chowchilla Bypass. The Fish Management Work Group (FMWG) plans to conduct a qualitative assessment of the viability of fish utilization in the Chowchilla Bypass and it may be completed during 2011.

Consistent and Changed Circumstances and Experience Gained Subsequent to the August 2009 RA Recommendation that Relate to Potential Reoperation of the Chowchilla Bifurcation Structure and Routing of Flows Down the Chowchilla Bypass

Some physical conditions on and adjacent to the San Joaquin river have remained relatively stable since my August 2009 RA Recommendation, other factors have changed significantly during the past year and one-half.

- **Circumstances that Remained Substantially Unchanged**

Land uses adjacent to the River have not changed significantly. Physical and biological conditions on and adjacent to the San Joaquin River below Friant Dam have not changed significantly since my 2009 recommendation. The physical channel conveyance capacities in Reach 2B, Reach 3 and Reach 4A have remained constant. Channel capacity constraints identified in August 2009 continue to prevent the release of higher spring flow pulses that are essential for understanding existing fish habitat including spawning gravel mobilization flows and mobilization flows in relation to temperatures.

Finally, the Settling Parties continue to disagree concerning the consistency of my 2009 Recommendation to study reoperation of the Chowchilla Bifurcation Structure with the terms and conditions of the Settlement. I continue to defer to the Settling Parties to resolve the issue of the consistency of my recommended reoperation study with the terms and conditions of the Settlement.

Updated RA Recommendation to Evaluate Reoperation of the Chowchilla Bypass Structure for Routing of Interim and Restoration Flows

*Restoration Administrator
December 1, 2010*

- **Changed Circumstances and Experience Gained While Implementing the 2010 Fall and Spring Interim Flows**

SJRRP experience during implementation of the 2010 fall and spring Interim Flows revealed that the SJRRP's ability to release Interim Flows from Friant Dam actually became more constrained following my August 2009 Recommendation. A primary contributor to the increased restrictions on Interim Flow releases from Friant Dam were the claims by downstream landowners in Reach 2B and Reach 4A that Interim Flows were impacting adjacent agricultural lands. In particular, flows below Sack Dam in Reach 4A were significantly constrained due to contentions that during the spring of 2010 Interim Flows adversely impacted groundwater elevations and salinity levels on adjacent agricultural lands. A report submitted by a landowner in Reach 4A resulted in Reclamation imposing additional flow restrictions in Reach 4A that limited flows below Sack Dam to ± 80 cfs. These flow reductions were implemented by Reclamation as a response to landowner claims that recent Interim Flows adjacent to their properties had adversely impacted their agricultural lands and failure to restrict future flows in Reach 4A would result in additional groundwater and salinity impacts. These claimed seepage impacts, when combined with seasonal variations in irrigation needs and Mendota Pool operating protocols, served to reduce Interim Flow releases from Friant Dam to release rates significantly below the "capped volume and flow rates" that were recognized to be in effect by the Settling Parties and RA at the time of my 2009 Chowchilla Bifurcation Structure reoperation recommendation.

Based on the experiences of the past year, it is clear that flow management issues in the downstream reaches of the San Joaquin River will continue to impact SJRRP Interim Flow and Restoration Flow releases from Friant Dam and that these impacts may be significantly greater than the limits experienced prior to preparation of the 2009 RA Recommendation. These ongoing flow restrictions may constrain achievement of experimental benefits that were expected to be realized during the Interim Flow Program and may impact the ability to collect data critical to successful reintroduction of salmon, thus reducing the prospects of achieving the Restoration Goal.

The impacts of the past year's constraints on Friant Dam releases and downstream Interim Flows potentially becomes even more significant when combined with the programmatic impacts of ongoing delays in completing the PEIR/S and the anticipated delays in completing the major project improvements in Reach 2B and Reach 4B and the Eastside Bypass. Completion of the latter project improvements is necessary to achieve full Interim Flow and Restoration Flow releases from Friant Dam. These improvements also are necessary to achieve the Settlement's downstream target flows in Reaches 3, 4 and 5 of the San Joaquin River. Reoperating the Chowchilla Bifurcation Structure to allow flows down the Chowchilla Bypass may be the only means of enabling Interim and Restoration Flow releases that achieve these Settlement release and flow targets.

Updated RA Recommendation to Evaluate Reoperation of the Chowchilla Bypass Structure for Routing of Interim and Restoration Flows

*Restoration Administrator
December 1, 2010*

Additional Considerations Relating to Achieving the Restoration Goal

The Chowchilla Bypass also may be the best alternative for routing reintroduced juvenile Chinook salmon downstream starting in 2012. Past and ongoing SJRRP delays in completing the PEIS/R and the prospect for significant delays in completing the major project improvements in Reach 2B and 4B indicate that when the full Restoration Flows are scheduled to commence in 2014 the physical improvements necessary to convey full Restoration Flows to the confluence with the Merced River will not be complete. The identified constraints on Friant Dam releases of both Interim Flows and Restoration Flows are expected to continue at some level for the next several years, well after the January 1, 2014, date when full Restoration Flows are required by the Settlement to commence.

In December 2012, when Chinook salmon are required by the Settlement to be reintroduced, the ability to identify alternatives that can successfully route salmon through the Study Area to the ocean becomes critical. Without the ability to use the Chowchilla Bypass for non-flood flows, the ability of the SJRRP to effectively provide for salmon escapement will be constrained at least until the Reach 2B and Reach 4B/Bypass project improvements are completed. In addition, during future flood events prior to completion of these major improvements, it is likely that Chinook salmon reintroduced after 2012 will be released into the Chowchilla Bypass whether or not the SJRRP decides to reoperate the Bifurcation Structure because future flood episodes will likely force recently reintroduced salmon into the Chowchilla Bypass due conveyance capacity constraints downstream of the Bifurcation Structure.

With the introduction of reintroduced salmon into the Chowchilla Bypass as a likely event, it seems prudent to study whether the Chowchilla Bypass also should be considered as a potential route for conveyance of Interim Flows and Restoration Flows as a means of improving the prospects for salmon survival, at least until completion of the major project improvements in Reaches 2B and 4B that will provide the conveyance capacities necessary to accommodate full Restoration Flows.

RA Consultation with the TAC

During preparation of this updated RA Recommendation, I consulted with the TAC to discuss new information provided by agency studies, changes in circumstances since my August 2009 Recommendation, and SJRRP experiences during implementation of the 2010 fall and spring Interim Flows. I also distributed a draft RA Recommendation update for review by the Settling Party representatives and other TAC members and convened a TAC conference call to discuss my draft recommendation.

My August 2009 RA Recommendation generated a concern that I implied that the RA Recommendation to study reoperating the Bifurcation structure was “unanimously approved” by the TAC. I do not agree with that assertion; therefore, it is important for all parties to

Updated RA Recommendation to Evaluate Reoperation of the Chowchilla Bypass Structure for Routing of Interim and Restoration Flows

*Restoration Administrator
December 1, 2010*

understand that I do not request a TAC “vote” on any RA recommendation that I prepare for submission to the Secretary of the Interior. As required by the Settlement, I consult with the TAC; however, I do not request a vote by the TAC. The Updated RA Recommendation set forth below benefited by TAC consultation but it is an independent RA Recommendation to the Secretary of the Interior.

Updated RA Recommendation

After completing my review of the August 2009 RA Recommendation and consulting with the TAC, I submit the following updated recommendations to the SJRRP Program Manager for consideration and action.

1. Based on the information and conclusions presented above, I continue to recommend that the SJRRP study the reoperation of the Chowchilla Bifurcation Structure to enable Interim Flows and Restoration Flows to be routed down the Chowchilla Bypass.
2. I recommend that the reoperation study be initiated as soon as possible and that it be completed early in 2011.
3. I recommend that the study identify:
 - a. Restoration benefits associated with reoperation of the Bifurcation Structure and conveyance of Interim Flows down the Chowchilla Bypass;
 - b. Flood, economic, restoration and/or other environmental impacts associated with reoperation of the Bifurcation Structure that could effectively preclude reoperation and conveyance of flows down the Chowchilla Bypass for Interim and Restoration Flows;
 - c. Legal, Settlement or Legislative obstacles that would preclude reoperation of the Bifurcation Structure and use of the Chowchilla Bypass for Interim and Restoration Flows; and
 - d. Other factors that may be relevant to a decision on reoperating the Chowchilla Bifurcation Structure and routing flows down the Chowchilla Bypass.
4. Finally, I recommend that if the reoperation study determines that reoperating the Bifurcation Structure and routing flows down the Chowchilla Bypass are feasible actions that would enhance the ability of the SJRRP to achieve the Restoration Goal, that the SJRRP initiate and complete the environmental compliance and permitting processes necessary to reoperate the Bifurcation Structure and permit Interim Flows down the Chowchilla Bypass.