

San Joaquin River Restoration Program

**Implementing the
Stipulation of Settlement**

in

NATURAL RESOURCES DEFENSE COUNCIL, et al.,

v.

**KIRK RODGERS, UNITED STATES BUREAU OF
RECLAMATION, et al.**

Case No. S-88-1658-LKK/GGH

UNITED STATES DISTRICT COURT

Program Management Plan

May 1, 2007

This document is in response to the Stipulation of Settlement (Settlement) in Natural Resources Defense Council, et al., v. Kirk Rodgers, et al., which was approved by the Court in October 2006. This Program Management Plan (PMP) for the San Joaquin River Restoration Program is intended to describe the approach to implementing the Settlement and is not intended to be inconsistent with, or alter the Settlement in any way. To the extent any inconsistencies exist, the Settlement will be the controlling document.

The PMP represents both the framework and strategy that the Implementing Agencies commit to use in collaboratively and adaptively implementing the Program. The undersigned recognize and expect that this strategy will change over time, as new information and data is collected, but commit to working together collaboratively to implement the Program.

The Program is intended to implement the Settlement in a manner consistent with applicable state and federal law. The Implementing Agencies recognize that nothing in the PMP commits the agencies to actions outside their authority. The agencies further recognize that the expenditure or advance of any money or the performance of any action in this PMP by the United States shall be contingent upon appropriation or allotments of funds in accordance with 31 U.S.C. §1341 (Anti-Deficiency Act). No liability shall accrue to the United States for failure to perform any action under this PMP in the event that funds are not appropriated or allotted. Likewise, any action to be undertaken by the State of California pursuant to the PMP is subject to the availability of appropriated funds. No liability shall accrue to the State of California for failure to perform any activity under this PMP in the event that funds are not appropriated.

In consideration of the foregoing, the undersigned support the use of the framework and strategy described in this PMP to begin implementation of the San Joaquin River Restoration Program. This document may be signed in counterparts.

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Date

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A.....Stipulation of Settlement

B.....Memorandum of Understanding with State

C.....Memorandum of Understanding with Third Parties

D.....MS Project Program Schedule

E.....Draft Fishery Management Plan Outline

F.....Settlement Actions Matrix

G.....Program Public Involvement Plan

H.....SJRRP Stage 1 Process Schedule

ACCRONYMS, INITIALISMS, AND ABBREVIATIONS

APE	Area of Project Effect
BA	Biological Assessment
BDR	Biological Data Report
BO	Biological Opinion
CALSIM	California Water Resources Simulation Model
CDEC	California Data Exchange Center
CEQ	Council of Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CHRIS	California Historic Resources Inventory System
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CVPM	Central Valley Production Model
CWA	Clean Water Act
DFG	Department of Fish and Game
DO	Dissolved Oxygen
DOJ	Department of Justice
DWR	Department of Water Resources
EIR	Environmental Impact Report
ESA	Endangered Species Act
EWA	Environmental Water Account
FD	Friant Division
FMP	Fishery Management Plan
FMW	Fishery Management Work Group
FWUA	Friant Water Users Authority
IPAR	Initial Program Alternatives Report
GIS	Geographic Information System
HCP	Habitat Conservation Plan
HEP	Habitat Evaluation Procedures
HRSWCD	Hood River Soil and Water Conservation District
MOU	Memorandum of Understanding
NAHC	Native American Heritage Commission
NCCP	National Communities Conservation Plan
NED	National Economic Development
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Services
NOI/NOP	Notice of Intent/Notice of Preparation
NRDC	Natural Resources Defense Council
OSE	Other Social Effects
P&G	Federal Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies
PED	Pre-Construction Engineering Design

PEIS/R	Programmatic Environmental Impact Statement/Environmental Impact Report
PMP	Program Management Plan
PMT	Program Management Team
PSIT	Puget Sound Indian Tribes
RA	Restoration Administrator
RED	Regional Economic Development
RFP	Request for Proposal
ROD	Record of Decision
ROE	Right of Entry
RRA	Reclamation Reform Act
RWA	Recovered Water Account
SHPO	State Historic Preservation Office
SJR	San Joaquin River
SJRB	San Joaquin River Basin
SJRRP	San Joaquin River Restoration Program
SJV Index	San Joaquin Valley Index
SWP	State Water Project
TAC	Technical Advisory Committee
TM	Technical Memorandum
USACE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
WAP	Water Acquisition Program
WDFW	Washington Department of Fish and Wildlife
WMG	Water Management Work Group

1.0 INTRODUCTION

This document is in response to the Stipulation of Settlement (Settlement) in Natural Resources Defense Council, et al., v. Kirk Rodgers, et al., which was approved by the Court in October 2006. This Program Management Plan (PMP) for the San Joaquin River Restoration Program is intended to describe the approach to implementing the Settlement and is not intended to be inconsistent with, or alter the Settlement in any way. To the extent any inconsistencies exist, the Settlement will be the controlling document. A copy of the Settlement is included as an attachment to this PMP (Attachment A).

1.1 The Settlement and Settling Parties

In 1988, a coalition of environmental groups, led by 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, Friant Division contractors. After more than 18 years of litigation of this lawsuit, known as Natural Resources Defense Council, et al., v. Kirk Rodgers, et al., a Settlement was reached. On September 13, 2006, the Settling Parties reached agreement on the terms and conditions of the Settlement which was subsequently approved by the Court on October 23, 2006. The “Settling Parties” include the NRDC, Friant Water Users Authority (FWUA), and the Departments of the Interior and Commerce.

1.2 Goals of the Settlement

The Settlement is based on two parallel Goals:

- 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 (Restoration Goal); and
- 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 (Water Management Goal).

The Parties acknowledge that the accomplishment of those Goals requires the performance of certain activities, such as environmental review, design, and construction, the details of which will be developed subsequently under the terms of this Settlement. Specifically, the Settlement calls for a combination of channel and structural improvements along the San Joaquin River below Friant Dam, and releases of additional water from Friant Dam to the confluence of the Merced River and planning, implementation, and funding measures to meet the Settlement Goals.

1.3 Implementing Agencies and the San Joaquin River Restoration Program

The Settlement states that the Secretary of the Interior (Secretary, unless otherwise noted) will implement the terms and conditions of the Settlement. Additionally, the Settling

Parties agreed that implementation of the Settlement will also require participation of the State of California (State). Therefore, concurrent with the execution of the Settlement, the Settling Parties entered into a Memorandum of Understanding (MOU) with the State of California (by and through the California Resources Agency, the Department of Water Resources (DWR), the Department of Fish and Game (DFG), and the California Environmental Protection Agency) regarding the State's role in the implementation of the Settlement. The program established to implement the Settlement will be called the San Joaquin River Restoration Program (Program), and the "implementing agencies" responsible for the management of the Program include United States Bureau of Reclamation (Reclamation), United States Fish and Wildlife Service (USFWS), National Marine Fisheries Service (NMFS), DWR, and DFG.

1.4 Program Management Plan

Since the Settlement was approved by the Court, the Department of the Interior (Interior), through Reclamation and the USFWS, has been working with the other Settling Parties, the State of California, affected Third Parties (discussed below), and other Federal agencies regarding the implementation process and other related matters, including initial planning and environmental evaluations. The implementing agencies have organized a Program Management Team (PMT) and several Technical Work Groups to develop a plan for implementing the Settlement through a joint NEPA (National Environmental Policy Act) and CEQA (California Environmental Quality Act) process.

This PMP describes the approach the implementing agencies will be using to implement the Settlement. Included in the approach are some overarching Program strategies that will guide the implementation process, an initial organizational structure, specific activities to be accomplished, schedule and major milestones, and a Public Involvement Plan. Initially, the PMP will help serve three primary purposes: 1) to help guide the implementing agencies as they organize and staff necessary Work Groups; 2) to inform the other Settling Parties and the public of the process the implementing agencies intend to follow to implement the Settlement; and 3) to help assure that all of the terms of the Settlement are addressed and successfully implemented. Once the implementing agencies have acquired and organized the necessary Work Groups and have received input on this PMP from the other Settling Parties and the public, this PMP may be revised and/or expanded. It is important to note that in the future, the strategies and processes set forth in this PMP will adapt and may expand over time, as more information is gathered about the implementation process as it relates to the two Goals outlined in the Settlement.

1.5 Program Strategies and Principles

As described above, the implementing agencies are jointly implementing the Program. The implementing agencies have committed to the following implementing principles that define the program approach.

1.5.1 Programmatic Evaluation

Consistent with NEPA and CEQA, the Program will complete a programmatic evaluation of alternatives and actions to implement the Settlement, resulting in development of a Programmatic Environmental Impact Statement/Report (PEIS/R), a Record of Decision (ROD) and a Notice of Determination (NOD). This programmatic NEPA/CEQA evaluation will include a complete, system-wide analysis of alternatives designed to meet both the Restoration Goal and the Water Management Goal prior to implementing any new site-specific actions. This level of analysis should assure evaluation and identification of beneficial and adverse impacts of all alternatives. In order to expedite implementation, it is likely that several site-specific activities will be evaluated in the programmatic NEPA/CEQA document. Reference to Program planning, evaluation, and implementation in this document assumes it will be carried out within the NEPA/CEQA process and be consistent with those regulations.

1.5.2 Complementary State Programs

As the programmatic NEPA/CEQA document is being developed, the Program will integrate State activities, project planning, and projects that are complementary to planning and implementation of the Settlement goals and consistent with the State MOU. Identification of State activities and the integration of appropriate State programs will occur at all appropriate levels described in Figure 1.

1.5.3 Stakeholder and Public Involvement

The implementing agencies are committed to an open and transparent planning and implementation process to ensure participation by interested and affected stakeholders, including Settling Parties, Third Parties, land and facility owners, elected officials, business and community interests, special interest groups, and other community members and the general public. The participation approaches and techniques are summarized in this PMP and described in more detail in the Public Involvement Plan (PIP) (Attachment G).

1.5.4 Alternatives Formulation

The Program will implement an alternatives development and screening process to consider all reasonable options for implementing the actions and achieving the Goals defined in the Settlement. The results of the alternatives formulation process will be documented in an Initial Program Alternatives Report as part of the programmatic environmental documentation consistent with NEPA and CEQA.

1.5.5 Integration of Restoration and Water Management Actions

During the alternatives formulation process for the PEIS/R, the Program intends that complete alternatives will ultimately include actions to meet both the Restoration Goal and the Water Management Goal. The primary reason for taking this approach is that

evaluating actions for each goal separately may not accurately represent the likely effects of implementing the Settlement as a whole. This approach will need to be revisited again early in the alternatives formulation process to determine if it is still appropriate.

1.5.6 Technical Implementation

The PMT has established four Technical Work Groups to facilitate and coordinate the significant technical work activities required to implement the Settlement. The Work Groups include representatives of the five implementing agencies and will be coordinated through the Program Manager. The Work Groups are Water Management, Fishery Management, Engineering and Design, and Environmental Compliance and Permitting.

1.5.7 Funding Strategies

Program funding is anticipated from several sources. Although several of these sources of funding have been identified along with a target for the total amount to be made available (see Section 5.2 Funding Sources), the amount and timing of funding on a year-to-year basis may vary considerably. Because of this variability, the State and Federal agencies will coordinate activities and budgets closely in order to ensure that priority Program actions are not delayed and that work is allowed to continue uninterrupted. The strategy will include budget and performance tracking to document contributions and provide accountability.

1.5.8 Program Performance

The Program will develop program-level objectives, targets, and metrics to assess progress during both planning and implementation. The PMT will report regularly on these performance metrics and Program accomplishments.

1.5.9 Adaptive Management

The Program will develop processes for adaptively managing implementation actions, recognizing that over the term of the Settlement unexpected occurrences may require adaptive approaches to achieve the Restoration Goal and Water Management Goal. These processes will address the requirements under the Government Performance and Results Act. An adaptive management strategy manages the river to ensure that the Program's Goals are achieved while simultaneously learning from all restoration and flow management actions. This increase in knowledge allows natural resource managers and the decision-makers to evaluate Program actions and address key uncertainties. As new information is obtained, Program actions will be revised or redesigned to improve effectiveness and efficiency. This learning process will be continuous to allow management to evolve as the ecosystem responds to Program, regulatory, and administrative actions throughout the watershed.

Although site-specific protocols will be designed for each major activity, the following general protocol describes the main objectives of what will occur:

1. Monitor and model the system in terms of current understanding and speculation about system dynamics based on sound science;
2. Design the management actions to maximize the conservation and information benefits;
3. Implement actions with a cautious experimental approach and monitor the system response;
4. Update alternative hypotheses, and adjust management action; and
5. Design new interventions based on improved understanding.

1.6 Stages of Implementation

The PMT has defined a three-stage implementation strategy. The three stages represent significant milestones in Program implementation and the beginning of each stage will likely represent an opportunity for the implementation strategies and Program staffing plans to be reviewed and updated. The following sections describe the activities that the Program will be focusing on during the three stages.

1.6.1 Stage 1 – Planning and Programmatic Evaluation

Stage 1 began with the approval of the Settlement and focuses on a programmatic planning and environmental review process that will include formulating and evaluating reasonable alternatives and identifying significant data needs and analyses required during Stage 2, as part of the NEPA/CEQA process. These efforts will provide the necessary information to start the draft programmatic PEIS/R scoping process. Among the actions that will take place during Stage 1:

- Formulation and evaluation of all channel and structural improvements needed in the San Joaquin River to meet the Restoration Goal;
- Development of a Fisheries Management Plan that will provide a roadmap to adaptively manage efforts to restore and maintain naturally-reproducing and self-sustaining populations of salmon and other fish in the San Joaquin River below Friant Dam to the confluence of the Merced River while considering life history stages significantly affected outside of this area and coordination with Water Management Goal actions;
- Development of the procedures and guidelines governing the release of water from Friant Dam to meet the Restoration Goal;
- Development of a water accounting system to account for net reductions in water deliveries to Friant contractors as a result of implementing the Settlement;
- Formulation and evaluation of all reasonable Water Management actions consistent with the requirement and limitations in Paragraph 16(a) of the Settlement to develop a plan for recirculation, recapture, reuse, exchange or transfer of the Interim Flows and Restoration Flows for the purpose of reducing or

- avoiding impacts to water deliveries to all of the Friant Division long-term contractors caused by the Interim Flows and Restoration Flows; and
- Development of an Interim Flow and monitoring program for immediate implementation in Stage 2.
 - Planning, design and environmental compliance for other actions necessary for (a) completion of Paragraph 11 projects (e.g. evaluating fish screen efficacy, fish passage) and (b) Paragraph 12 projects that are appropriately advanced in Stage 1 actions.

Although these activities will be initiated separately at first, the relationships and dependencies between them are significant and will be closely coordinated. As such, it is anticipated that by the end of Stage 1, each of the activities will be integrated together in the programmatic environmental documents. Specific relationships and dependencies, as well as communication protocols will be described in a Program integration document.

Throughout Stage 1, technical memoranda and reports will be prepared and distributed to the public for review and comment on the analysis results and decisions made by the Program. In general, this stage will include a Programmatic NEPA/CEQA environmental review process, initial studies and consultations required for acquiring necessary permits, and “feasibility-level” engineering, designs, and cost estimates of the Program alternatives, concluding in September 2009 with the PEIS/R and a ROD/NOD.

1.6.2 Stage 2 – Initiation of Interim Flows, Salmon Reintroduction, and River Improvements

Immediately upon the initiation of Stage 2, Interim Flows from Friant Dam will be released into the San Joaquin River and monitoring programs will be implemented to begin facilitating the Restoration Goal. These releases will be made consistent with the Interim Flow and monitoring programs developed in Stage 1. Stage 2 will also include the completion of any required site-specific environmental review and documentation, detailed engineering and designs to initiate construction contracts, permitting, and real-estate acquisitions required for implementation. Spring-run and fall-run Chinook salmon will be reintroduced to the San Joaquin River by December 31, 2012. Stage 2 will conclude in December 2013 after all Phase 1 priority construction activities have been completed.

1.6.3 Stage 3 – Initiation of Restoration Flows

Stage 3 will begin with the full Restoration Flow releases from Friant Dam. This stage will also include construction of the remaining Program features that were not Phase 1 priority actions, and the operation and maintenance of project facilities. The stage will conclude in December 2025 when the Settlement expires; however, on-going operations and maintenance of facilities and structures will continue indefinitely.

1.7 Federal Authorization

Interior agencies are authorized to work on initial planning and environmental review activities under the Central Valley Project Improvement Act, P.L. 102-575, Title XXXIV. Without additional authorizing legislation, however, Interior agencies lack sufficient authority to implement all of the actions in the Settlement. As part of the Settlement, Exhibit A, draft Federal legislation was included to address this issue. On January 4, 2007, legislation entitled “The San Joaquin River Settlement Act,” was reintroduced in both houses of Congress to authorize the Secretary to implement the Settlement. The authorizing legislation will likely provide specific direction and in some cases additional requirements to the Secretary and the Secretary of Commerce regarding certain areas of implementation. The Settling Parties have already committed to supporting the legislation in its current draft form and believe that it is consistent with the Settlement. It is intended that this PMP may be amended to fully address any requirements presented in the final legislation.

The Department of Commerce is authorized to implement the Settlement under the Anadromous Fish Conservation Act, 16 U.S.C. section 757a, et seq.

2.0 PROGRAM OVERVIEW

This Program Overview describes the Program participants and their responsibilities, the structure of the organization and how each participant relates to one another. It also describes river reaches, a summary of key actions in the Settlement, and a timeline of key Program milestones. Finally, the section summarizes assumptions and constraints of the proposed actions outlined in the Settlement.

2.1 Participants and Responsibilities

2.1.1 Settling Parties

As described in the introduction, the “Settling Parties” include the NRDC, FWUA, and the Departments of the Interior and Commerce.

2.1.2 State MOU

The State of California has committed its support of the Settlement by entering into a Memorandum of Understanding (State MOU) with the Settling Parties that outlines a collaborative role for the State in the planning, design, funding and implementation of the actions set forth in the Agreement. The general principles outlined in the State MOU are as follows:

- The State Agencies intend to assist the Settling Parties in implementation of the Settlement consistent with the State Agencies’ authorities, resources and broader regional resource strategies.

- The Settling Parties intend to assist the State Agencies in their efforts to support the implementation of the Settlement, consistent with the terms and conditions of the Settlement.
- The State Agencies and the Settling Parties intend to work together collaboratively in the planning, design, funding and implementation of appropriate aspects of the Settlement.

2.1.3 Implementing Agencies

The five implementing agencies responsible for the management of the Program are Reclamation, USFWS, NMFS, DWR, and DFG. Although Reclamation and USFWS are the Department of the Interior agencies representing the Secretary, who, in general, is responsible for implementing the Settlement, all five implementing agencies signed the State MOU, wherein all parties agreed to work together collaboratively to implement the Settlement. The implementing agencies will implement the terms of the Settlement, consistent with the State MOU, through the planning, design, funding, and implementation of the actions on the San Joaquin River called for by the Settlement. Each agency's expected role in implementing the Program is as follows:

- Bureau of Reclamation

Reclamation owns and operates Friant Dam as part of the Friant Division (FD) of the CVP and holds contracts with water agencies in the south San Joaquin Valley. Reclamation will serve as a lead NEPA agency in the implementation of the Settlement. Reclamation will be responsible for re-operating Friant Dam consistent with the Settlement and ensuring all related impacts are addressed appropriately. Reclamation will also be responsible for formulating and implementing all aspects of the Water Management Goal described in Paragraph 16 of the Settlement.

- Fish and Wildlife Service

USFWS will provide technical expertise and assistance in fish, wildlife, and associated habitat monitoring, management, and restoration; fish culture, reintroduction, and population supplementation; aquatic animal health assessment; instream flow management; and adaptive management strategies to assess the effectiveness of habitat restoration, population conservation, and flow management actions. The Settlement requires that USFWS submit a completed permit application to NMFS for the reintroduction of spring-run Chinook salmon, and that the Secretary, through the USFWS, ensure that spring- and fall-run Chinook salmon are reintroduced at the earliest practical date after commencement of sufficient flows. USFWS manages National Wildlife Refuge lands within and downstream of the section of the San Joaquin River covered by the Settlement, and some of the in-river and riparian restoration envisioned in the Settlement may occur on these lands. USFWS will coordinate with applicable Federal and State agencies under the Fish & Wildlife Coordination Act, Migratory Bird Treaty Act, Clean Water Act, Federal Power Act, and the Central Valley Project Improvement Act, and has regulatory responsibility under the Endangered Species Act (ESA).

- National Marine Fisheries Service (NMFS, also known as NOAA Fisheries Service)

NMFS is dedicated to the stewardship of living marine resources through science-based conservation and management, and the promotion of healthy ecosystems. As a steward, NMFS conserves, protects, and manages living marine resources in a way that ensures their continuation as functioning components of marine ecosystems, affords economic opportunities, and enhances the quality of life for the American public. This stewardship is implemented under several Federal Acts including: the Magnuson-Stevens Act, Federal Power Act, Endangered Species Act, Energy Policy Act, Coastal Wetlands Protection, Planning, and Restoration Act, Marine Mammal Protection Act, and Oil Pollution Act).

NMFS will provide technical expertise on fishery resources and habitat issues. NMFS must issue a decision on a USFWS permit application for the reintroduction of spring-run Chinook salmon as soon as practical but no later than April 30, 2012. The Secretary of Commerce consults with the Secretary of the Interior to ensure that spring- and fall-run Chinook salmon are reintroduced at the earliest practical date after commencement of sufficient flows and the issuance of all necessary permits.

- California Department of Water Resources

DWR will assist in various aspects of the planning, design, and construction of physical improvements identified in the Settlement, including projects related to flood protection, levee relocation, construction standards and maintenance, and modifications to, and maintenance of, channel facilities. This will include assisting with obtaining all necessary permits, designing and constructing facilities to provide for fish passage and to minimize fish entrainment, establishing appropriate riparian habitat, and identifying and implementing the best available science and monitoring so the system can be adaptively managed to better achieve the Goals and document results. DWR also intends to assist in various aspects of the implementation of the Water Management Goal identified in the Settlement.

- California Department of Fish and Game

DFG will assist in various aspects of the planning and design of activities, including providing technical assistance to the Settling Parties on actions related to the release of flows identified in the Settlement, the design and construction of facilities to provide for fish passage and to prevent fish entrainment as identified in the Settlement. DFG also will provide technical assistance in the manner of reintroducing, monitoring and evaluating fish in the main stem of the San Joaquin River, and establishing and maintaining appropriate riparian habitat. DFG is the permitting agency for State incidental take permits under CESA, the regulatory authority for the State Streambed Alteration Agreement process and other aspects of Fish and Game code. DFG must comply with CEQA in issuing a permit. DFG also owns land in the project area and is a member of the San Joaquin River Conservancy Board, which manages the San Joaquin Parkway.

2.1.4 Restoration Administrator

The Restoration Administrator (RA) is appointed by the Plaintiffs and the Friant Parties for a six-year term and provides recommendations to the Secretary regarding specific elements of the Settlement and certain issues related to the Restoration Goal. The RA also consults with the Technical Advisory Committee (TAC, described below) on topics including the following:

- How River Restoration hydrographs are to be implemented;
- When Buffer Flows (two releases of up to an additional 10% of the applicable hydrograph flows) may be needed;
- How river channel and fish passage improvements will be made;
- Reintroduction of salmon;
- Interim Flows for data collection purposes;
- Targets, goals and milestones for successful implementation of the fishery program; and
- Coordination of flows with downstream tributary fishery efforts.

The RA schedules and attends TAC meetings, coordinates or facilitates the completion and/or production of any TAC reports, receives and considers any recommendations of the TAC, and ensures that meetings of the TAC are open to agency staff assisting in Settlement implementation.

In addition to the relationship with the TAC, the RA makes recommendations to the Secretaries of the Interior and Commerce regarding stock selection, reintroduction strategies, and other significant decisions relating to reintroduction and management of restored Chinook salmon below Friant Dam. The RA, in coordination with the TAC, will provide an annual written report to the Settling Parties about the progress made over the previous calendar year in and responsibilities of the RA and the TAC are outlined in the Settlement.

2.1.5 Technical Advisory Committee

The TAC is established by the Friant Defendants and the Plaintiffs to assist the RA. The voting members include two representatives from both the Plaintiffs and the Friant Defendants and two mutually-agreed upon designees. Representatives from DWR and DFG participate as ex officio non-voting members. The Secretary of the Interior, or the Secretary of Commerce, as appropriate, shall designate staff from Reclamation, the USFWS, and the NMFS to act as liaisons to the TAC to ensure coordination and sharing of information between the TAC and the implementing agencies. The TAC assists and advises the RA regarding those areas outlined in the Settlement. TAC members have relevant technical or scientific background or expertise in fields related to river restoration or fishery restoration. Terms are for three years.

2.1.6 Cooperating Agencies (NEPA)

Reclamation will invite eligible governmental entities to participate as cooperating agencies for the development of the Programmatic Environmental Impact Statement/Environmental Impact Report (PEIS/R) in accordance with the requirements of NEPA and the Council of Environmental Quality regulations. Reclamation will also consider any requests by eligible governmental entities to participate as a cooperating agency, and will either accept or deny such requests. If such a request is denied, Reclamation will state in writing, within the PEIS/R, the reasons for such denial.

Throughout the development of the PEIS/R, Reclamation will collaborate, to the fullest extent practicable, with all cooperating agencies, concerning those issues relating to their jurisdiction and/or special expertise.

Collaboration goals are to:

- Identify issues to be addressed in the PEIS/R;
- Arrange for the collection and/or assembly of necessary resource, environmental, social, economic, and institutional data;
- Analyze data;
- Develop alternatives;
- Evaluate alternatives and estimate the effects of implementing each alternative; and
- Carry out any other task necessary for the development of the PEIS/R.

Reclamation and the eligible governmental entities will express in a MOU their respective roles, assignment of issues, schedules, and staff commitments in order to keep the NEPA process on track and within the time schedule.

2.1.7 Lead, Responsible and Trustee Agencies (CEQA)

CEQA requires that the Lead State Agency consult with, and request comments on the Draft PEIS/R from, all Responsible and Trustee Agencies, agencies with jurisdiction by law, and representatives from cities and counties adjacent to the project site. Notices typically involve transmittal of the Draft PEIS/R with a specific request for comments. Throughout the development of the PEIS/R, the Lead, Responsible and State Trustee Agencies will collaborate, to the fullest extent practicable, with Reclamation and all cooperating agencies, concerning those issues relating to their jurisdiction and/or special expertise.

Collaboration goals are to:

- Identify issues to be addressed in the PEIS/R;
- Arrange for the collection and/or assembly of necessary resource, environmental, social, economic, and institutional data;
- Analyze data;

- Develop alternatives;
- Evaluate alternatives and estimate the effects of implementing each alternative; and
- Carry out or administer any other task necessary for the development of the environmental impact report.

The Lead State Agency and the eligible governmental entities will express in a MOU their respective roles, assignment of issues, schedules, and staff commitments in order to keep the CEQA process on track and within the time schedule.

The State agencies intend to identify specific activities and the nature and level of assistance in future agreements, including CEQA compliance.

2.1.8 California Endangered Species Act

The California Endangered Species Act (CESA) is administered by DFG and prohibits the take of plant and animal species designated by the Fish and Game Commission as either threatened or endangered in the state of California. DFG will work as the State permitting authority and a cooperating agency to ensure protection of state listed species and compliance with CESA. If a State Incidental Take Permit is necessary, DFG must comply with CEQA in issuing a permit.

2.1.9 Third Party MOU

On February 26, 2007, Reclamation entered into a Memorandum of Understanding (Third Party MOU) with a group of Third Parties with downstream interests. This MOU acknowledges the interest of a group of identified Third Parties along the San Joaquin River in the implementation of the restoration and water management activities as well as in maintaining the agricultural economy of the region. This MOU also outlines this Third Parties' groups' collaborative role in the Settlement implementation process.

Consistent with the Third Party MOU, the Program Manager will use reasonable efforts under the circumstances to provide the Third Parties (through a Coordinating Committee established by the Third Parties) any recommendation by the Restoration Administrator to the Secretary or the Secretary's designee regarding a matter that is a subject of this MOU. Any comments from the Coordinating Committee to the Secretary or the Secretary's designee shall be provided in a timely manner.

2.1.10 Other Stakeholders and General Public

Other stakeholders and the general public will have opportunities to review and provide input to relevant program activities through the public participation program, the NEPA and CEQA process, and public notices and/or hearings required by various regulatory agencies. Additionally, the Settlement contemplates coordination with and/or appropriate input from landowners, long-term water contractors, additional stakeholders and the

general public. The approach to involve these participants is described in detail in the PIP (Attachment G)

2.2 Interagency Management Structure

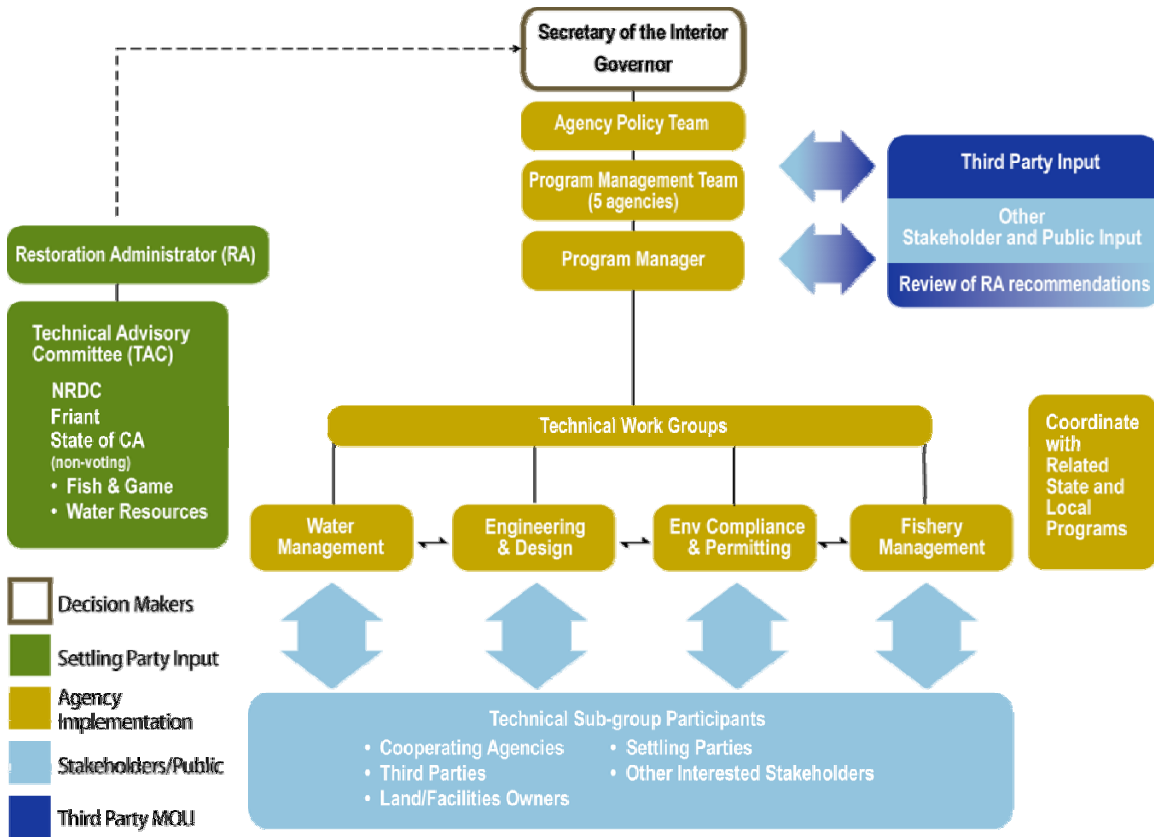
Figure 1 outlines the Program organization chart and demonstrates how the Program participants interact and receive and provide information. The Settlement specifically describes how the RA, the TAC, and the Secretary (or designee) are chosen and/or share information. The remaining elements of the diagram were completed after the State MOU was signed on September 13, 2006.

The Program consists of numerous projects, organizational levels, goals, objectives, deliverables, and substantial technical details requiring the development of a Program Integration Plan to define and control the schedule, performance, risks, communication, and roles of the various organizational elements. Overall, the goals of the Program Integration Plan will be to acquire efficient and effective integration between the numerous organization components. For example, all four of the Technical Work Groups will be working concurrently on guidance documents and various technical products that will rely on information from all four of the Technical Work Groups. In addition, it will be necessary for the Program to coordinate and communicate with external programs such as state and federal refuges and water operations and planning efforts and related and complementary State programs. Communication roles and processes for integration between and among these tasks will be described sufficiently to guide the integration in an effective and efficient manner.

2.2.1 Secretary of the Interior

The Secretary (or designee) directs and implements the terms and conditions of the Settlement in cooperation with the State of California, in an effort to achieve the Restoration Goal and the Water Management Goal.

Figure 1. Program Organizational Chart



2.2.2 Agency Policy Team

The Agency Policy Team (APT) consists of designees of the Secretary, Secretary of Commerce, and the California Resources Secretary. The Team advises the Secretary (or designee) and the Governor (or designee) and is kept informed of the Technical Work Groups’ progress, as well as the progress of the RA and the TAC by the Program Management Team. The APT also resolves policy issues elevated by the Program Management Team.

2.2.3 Program Management Team

The Program Management Team (PMT) consists of managing representatives from the implementing agencies. The PMT oversees the implementation of the Settlement and that the Restoration Goal and the Water Management Goal are met. The Team oversees the work of the Technical Work Groups, ensures coordination among Work Groups, and provides guidance on policy issues elevated to the PMT by the Work Groups. The PMT

reports to the Secretary and the Agency Policy Team, and elevates unresolved policy issues to the APT.

2.2.4 Program Manager

The Program Manager manages Program implementation, coordinates and administers meetings of the PMT, reports progress and elevates issues to the PMT, coordinates activities of the Technical Work Groups, ensures integration among parallel activities, and coordinates with the RA and other advisory committees. The Program Manager is designated by the Secretary (or designee).

2.2.5 Technical Work Groups

The following four multi-agency Technical Work Groups are responsible for technical work required to meet the two Settlement Goals. Each of the Technical Work Groups includes representatives of the implementing agencies, as appropriate, to accomplish the activities related to each Group's responsibilities and each has a Team Leader that coordinates directly with the Program Manager.

The Technical Work Group representatives do not have the authority to make policy decisions on behalf of the implementing agencies. When and if policy decisions at the Work Group level are required that can not be resolved within the Work Group, the issue is elevated to the Program Manager for resolution or elevation to the PMT.

The activities from each Work Group are closely related to one another and in some cases overlap. Therefore, close coordination and integration are a critical component of Program implementation. Each Work Group will be responsible for the coordination, collaboration, and integration of their activities with the other Work Groups.

The following briefly describes the responsibilities of the four Technical Work Groups:

- **Water Management Work Group**

The Water Management Work Group will be responsible for completing technical analyses and making recommendations for the sections in the Settlement related to Water Management including meeting the Water Management Goal. Activities include 1) the development and implementation of a plan to recover water released for restoration purposes; 2) the development of guidelines for the procedures described in Paragraph 13(j) of the Settlement; 3) development of guidelines and procedures for the implementation of the Recovered Water Account and a water acquisition program; 4) installation of monitoring stations related to items 2 and 3 above; and 5) a process to analyze, monitor, and make decisions on the coordination of restoration flows with other eastside tributaries and other fishery restoration programs on the San Joaquin River.

- **Engineering and Design Work Group**

The Engineering and Design (E&D) Work Group will be responsible for completing all levels of engineering designs and cost estimates for all Program alternatives identified in

the formulation process, including alternatives to meet both the Water Management Goal and the Restoration Goal of the Settlement. Responsibilities will also include the collection of field data required for engineering designs, coordination with real estate specialists to access private lands, and the development of consistent design criteria to be used for all Program alternatives.

- Environmental Compliance, and Permitting Work Group

The primary responsibility of the Environmental Compliance, and Permitting Work Group is to ensure that all applicable environmental studies, permits, alternatives formulation, and other requirements are met in order to initiate construction activities. This Work Group will be responsible for formulating and evaluating Program alternatives based on the Program purpose and need and evaluation criteria. Once specific portions of an alternative have been formulated, this Work Group is responsible for developing a detailed project description for further environmental studies as well as engineering studies by the E&D Work Group.

- Fishery Management Work Group

The primary responsibility of the Fishery Management Work Group is to plan for and coordinate efforts to implement the sections in the Settlement related to meeting the Restoration Goal. Activities include: 1) developing a Fishery Management Plan designed to provide a roadmap to adaptively manage efforts to restore and maintain naturally reproducing and self-sustaining populations of salmon and other fish in the San Joaquin River below Friant Dam to the confluence of the Merced River; 2) providing information for the permitting process and documentation specific to Paragraph 14 of the Settlement; and 3) recommending and coordinating all fishery related planning, modeling, or research and monitoring necessary to inform efforts of the Water Management, Engineering and Design, and Environmental Compliance and Permitting Work Groups supporting implementation of the Restoration Goal and the Water Management Goal.

2.2.6 Technical Subgroups

Subgroups will be established to focus on specific technical aspects of the Settlement implementation. The make-up of each subgroup will typically include representatives from the four primary Work Groups and cooperating agencies with appropriate expertise or sufficient knowledge in the particular study area to ensure the objectives of their respective Work Groups are considered and incorporated into the study process. Subgroups will be responsible for the identification of linkages between study efforts and coordination and integration of their work with other subgroups in a timely manner. Subgroups will be responsible for directing and overseeing the work effort of staff assigned to the study as well as potential consultants. When appropriate, subgroups will collaborate on common study elements. Technical subgroups will be supported by technical experts from the implementing agencies, other Federal, State and local cooperating agencies available in a review and advisory capacity and, periodically, stakeholder subgroups, which may include representatives from the Settling Parties, Third Parties, landowners, local agencies, and members of the public having specific knowledge relevant to a particular study or activity. Stakeholder groups will provide

feedback on technical processes and interim documents. In addition, subgroups will periodically meet with the public on broader, Program-wide issues, concerns, and opportunities.

Examples of likely technical subgroups include:

- Water Recapture Plan subgroup
- Recovered Water Account subgroup
- Restoration Flows Procedures and Guidelines subgroup
- Fishery Monitoring subgroup
- Quantitative Modeling subgroup

Other subgroups will be established, as appropriate, to facilitate the implementation of the Settlement.

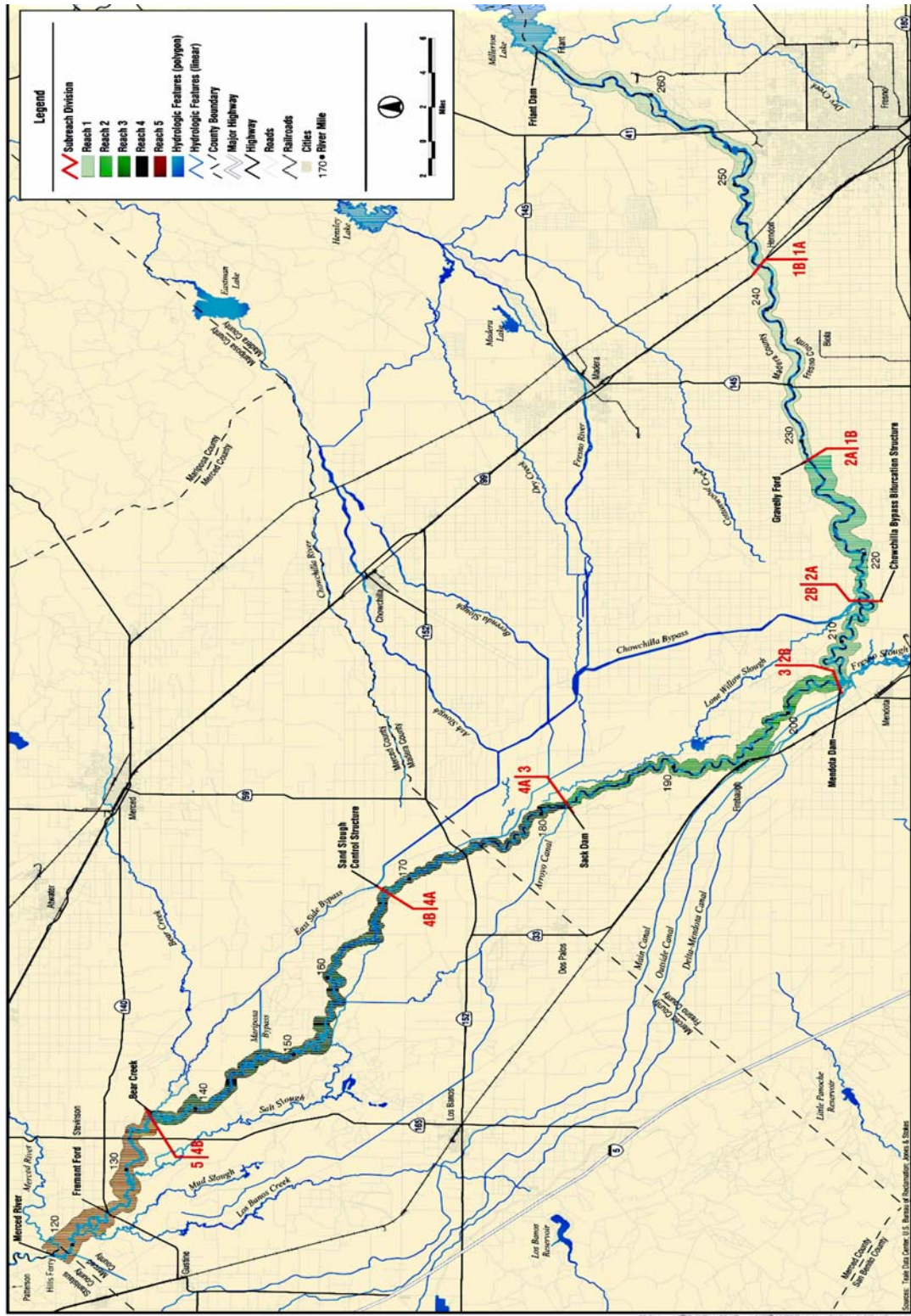
2.2.7 Groups Identified in Third Party MOU

The February 26, 2007 Third Party MOU identifies two subcommittees, which will be convened by the Third Party organizations identified in the MOU. These subcommittees, a landowners Committee and a Coordinating Committee, will address further concerns and provide input to program implementation elements.

2.3 River Reaches

The San Joaquin River is bounded by the Sierra Nevada on the east and Coast Ranges on the west; its southern boundary is divided between the Tulare Lake basin, and its northern boundary is the Delta near Stockton. The river reaches described below are based on the December 2002 San Joaquin River Restoration Study Background Report. These reaches include approximately 150 miles of the San Joaquin River from Friant Dam at the upstream end near the town of Friant, to the confluence with the Merced River at the downstream end. The river flows to the north of the metropolitan area of Fresno, and passes near the communities of Biola, Mendota, Firebaugh, Dos Palos, and Los Banos, within the counties of Fresno, Madera, and Merced.

Figure 2. River Reaches



Each of the five reaches is briefly described below.

- Reach 1—River Mile 267.5 to River Mile 229.0

Reach 1 begins at Friant Dam, where the San Joaquin River exits the Sierra Nevada foothills and enters the Central Valley floor. The downstream end is defined at Gravelly Ford. Reach 1 is divided into two sub-reaches; Sub-reach 1A extends from Friant Dam to State Route 99, and Sub-reach 1B begins at State Route 99 and extends downstream to Gravelly Ford.

- Reach 2—RM 229.0 to RM 204.8

Reach 2 meanders across the Pleistocene alluvial fan of the San Joaquin River between Gravelly Ford and Mendota Dam. The downstream boundary at Mendota Dam also marks the location where the river intersects the north-south axis of the valley. Reach 2 is divided into two sub-reaches. Sub-reach 2A begins at Gravelly Ford and extends downstream to the Chowchilla Bypass Bifurcation Structure. Sub-reach 2B extends from the bifurcation structure downstream to Mendota Dam.

- Reach 3—RM 204.8 to RM 182.0

Reach 3 contains perennial flows of up to 600 cfs, due to water deliveries from the Delta Mendota Canal, through the San Joaquin River channel, and to the Sack Dam diversion into Arroyo Canal. No unique sub-reaches are delineated within Reach 3.

- Reach 4—RM 182.0 to RM 135.8

Reach 4 is divided into two sub-reaches. Sub-reach 4A extends from Sack Dam downstream to the Sand Slough Control Structure. Sub-reach 4B begins at the Sand Slough Control Structure and extends downstream to the confluence with Bear Creek and the Eastside Bypass.

- Reach 5—RM 135.8 to RM 118.0

Reach 5 is bounded on the left bank by Project levees downstream to the Salt Slough confluence and on the right bank to the Merced River confluence. No sub-reaches were delineated within Reach 5.

The Program study area could be different than the area described in the December 2002 San Joaquin River Restoration Study Background Report depending on the alternatives developed in the NEPA/CEQA process.

2.4 Summary of Proposed Actions in Settlement

Implementation of the Restoration Goal includes three essential elements. First, certain improvements providing for channel capacity, fish habitat needs, related flood protection, fish passage and fish screening are required. Second, flow releases at Friant Dam are required to create conditions conducive to Restoration. Third, fish populations are to be

restored and maintained in “good condition” in the San Joaquin River below Friant Dam to the confluence of the Merced River.

Implementation of the Water Management Goal includes two critical elements. First, it requires the development and implementation of a plan to recirculate, recapture, reuse, exchange, or transfer water released for Restoration Flows consistent with certain criteria that are identified in the Settlement. Second, it creates a Recovered Water Account (RWA) that provides an opportunity to make water available to FD long-term contractors who have had reductions in water supply as a direct result of the Interim or Restoration Flows at a reduced water rate in certain wet hydrologic conditions.

As described in section 1.5, an adaptive management strategy will be employed to determine the best means for effectively and efficiently achieving the Restoration Goal and the Water Management Goal.

2.4.1 Settlement Milestones

The proposed actions in the Settlement outline how the implementing agencies will achieve the Restoration Goal and the Water Management Goal. As part of the Settlement, the Settling Parties developed a detailed timeline for the development and implementation of the Program improvements, which are summarized in the following table. For a more detailed summary of Settlement milestones, see the Settlement Actions Matrix in Attachment F.

Table 1. Major Settlement Milestones

Table 1. San Joaquin River Restoration Program Milestones	Date	Milestone
STAGE 1	October 2006	Effective date of Settlement
		Effective date of MOU with State of California
		Secretary commences Settlement implementation
	December 2006	Friant & NRDC select Restoration Administrator
		Friant & NRDC designate six members for the Technical Advisory Committee (TAC)
		Authorizing legislation passed
	January 2007	All existing long-term water service contracts in the Friant Division and Hidden and Buchanan Units amended
		Secretaries of the Interior and Commerce, and the California Secretary for Resources, and the Secretary of CalEPA establish a process for the State and Federal agencies to implement the Settlement
October 2007	Restoration Administrator, in consultation with the TAC, make recommendations to the Secretary regarding: stock selection; reintroduction strategies; appropriate use of existing and enhanced hatchery facilities and trap and haul; appropriate interim targets; goals and milestones for annual escapement of wild adult Chinook salmon; appropriate long-term targets for annual escapement; and coordination of releases from Friant Dam with fishery restoration actions on the Merced, Tuolumne, and Stanislaus Rivers	
STAGE 2	September 2009	NEPA, NHPA, ESA, CEQA review completed
	October 2009	Initiate Interim Flow and Monitoring Program in San Joaquin River
	September 2010	USFWS submits a completed permit application to the NMFS for the reintroduction of spring run Chinook salmon
	April 2012	NMFS issues a decision on the permit application for the reintroduction of spring run Chinook salmon
	December 2012	Reintroduce Spring/Fall Run Salmon
	December 2013	Secretary, in consultation with the Settling Parties and Friant Parties develops operational guidelines
Phase 1 Improvements completed		
STAGE 3	January 2014	Initiate full Restoration Flows
	December 2016	Phase 2 Improvements completed
	December 2024	Secretary of Commerce reports to Congress on the progress made on the reintroduction of spring and fall run Chinook and discusses the plans for future implementation of the Settlement
		Review and revise restoration flows, if necessary
	December 2025	Review and revise restoration flows, if necessary
	January – July 2026	Any Party may file a motion to request an increase, decrease or material change in the quantity and or timing of the Restoration Flows

2.5 Assumptions and Constraints regarding Timelines

The major milestones agreed to in the Settlement are based on an implementation schedule that was developed during the Settlement process assuming that ideal conditions throughout all stages of implementation in terms of available funding and cooperation from other Federal, state, and local agencies and from landowners and the general public are met. A set of assumptions were made in negotiating the implementation schedule for Paragraph 11 actions. These assumptions include a technical understanding of the nature of the improvements given the current limited availability of detailed site-specific information as well as availability of sufficient funding and resources, and timely availability of detailed information, and survey results for environmental analysis in order to implement Program recommendations. A summary of the major timeline assumptions discussed during the Settlement negotiations are provided below.

2.5.1 Pre-Construction Environmental Compliance Requirement Assumptions

Surveys conducted for endangered or at risk species, historic structures and buried archeological sites; timely acquisition of permits and rights of entry for surveys and regulatory processes; no litigation-related delays; full agency participation and completion of environmental compliance action.

2.5.2 Real Estate Assumptions

Timely acquisition of necessary land and entry rights; cooperative landowners; completion of NEPA/CEQA documentation for acquisition of required real property rights.

2.5.3 Engineering and Design Assumptions

Congressional authorization and appropriations; geological field investigations, field surveys, hydraulic studies, and cost estimates and documentation for alternatives; project features in operation and USFWS and NMFS collaboration for fish screening and passageways; timely issuance of necessary permits and final engineering design data for construction; development, awarding and funding of contracts.

2.5.4 Construction Assumptions

Construction contracts awarded before completion of final designs; no reduction in the annual 120-day construction period due to weather, winter flows and endangered species restrictions; completion of permits before solicitation of bids; availability of construction materials and contractor forces and equipment.

3.0 PROGRAM STAFF ORGANIZATION

This section outlines the staff organization of the Program, and Program contacts from the PMT.

3.1 Organization Charts, Staff Assignments and Consultant Team

As described in the Introduction of this PMP, initially, the PMP will help serve three primary purposes: 1) to help guide the implementing agencies as they organize and staff necessary Work Groups; 2) to inform the other Settling Parties and the public on the process the implementing agencies intend to follow to implement the Settlement; and 3) to help assure that all of the terms of the Settlement are addressed and successfully implemented. Once the implementing agencies have acquired and organized the necessary Work Groups and have received input on this PMP from the other Settling Parties and the public, this PMP may be revised and/or expanded.

After the completion of this PMP, the implementing agencies intend to fully staff the management functions and Technical Work Groups necessary to implement the Settlement, starting with the resources required to implement Stage 1. This will also include hiring a consultant team to help staff the Technical Work Groups. Once management and the Technical Work Groups are in place, this PMP will be updated to include a detailed description of the organization chart, staff assignments, and the consultant team. It is also likely that certain elements of the implementation strategy described in this PMP will be updated based on feedback from various reviews and input from the consultant team.

3.2 Contact List

The contact list will be comprised of Implementing Agencies and Settling Parties, Third Parties, stakeholders, interested individuals and organizations, and key media. The list will be continually updated. The initial list, below, includes the implementing agency leads who act as the PMT.

- U.S. Bureau of Reclamation (U.S. Department of the Interior)
Jason Phillips
SJRRP Interim Program Manager
2800 Cottage Way
Sacramento, CA 95825-1898
916-978-5033
jphillips@mp.usbr.gov

- U.S. Fish & Wildlife Service (U.S. Department of the Interior)
Dan Castleberry
Fisheries Program Manager
California and Nevada Operations Office
2800 Cottage Way, Suite W2606
Sacramento, CA 95825-1846
916-978-6178
dan_castleberry@fws.gov

- NOAA Fisheries Service (U.S. Department of Commerce)
 Russell J. Bellmer, PhD
 Fishery Biologist
 650 Capital Mall Suite 8-300
 Sacramento, CA 95814
 916-930-3615
 Russell.Bellmer@NOAA.gov

- California Department of Water Resources
 Paula Landis
 San Joaquin District Chief
 3374 East Shields Ave.
 Fresno, CA 93726
 559-230-3310
 plandis@water.ca.gov

- California Department of Fish and Game
 Dale Mitchell
 Environmental Program Manager
 1234 East Shaw Avenue,
 Fresno, CA 93710
 559-243-4005 ext. 156
 dfmitchell@dfg.ca.gov

4.0 PROGRAM TASKS

The following sections detail the tasks to be accomplished to implement the Settlement, including goals for each Work Group and subgroup, as well as public involvement strategies.

4.1 Program Management

4.1.1 Document Review Process

Documents will require a multi-level review and approval process. Technical Memoranda will typically include reviews by the Technical Work Groups and the PMT before releasing them to the RA, stakeholders, and the general public for review. Reports will follow a similar review process with an added review and approval by the APT and the Secretary. Technical Memoranda and reports will typically be submitted as Administrative Drafts, Drafts, and Finals. Comments will be satisfactorily addressed at each submittal stage.

Due to time constraints, review periods will typically be of short duration. Reviews will be initiated at the Technical Work Group level and proceed to the next level review

following a general level of coordination between the subgroup/focused stakeholder group and the Technical Work Group.

4.1.2 Co-located Office

During Stage 1, Reclamation will establish a program office where staff can co-locate to ensure coordination in implementation and streamline document preparation time. The consultant team and program staff from other agencies may also have staff co-located in this Program office. DWR and DFG program staff intend to work out of area offices in coordination with the co-located Federal team.

4.1.3 Project Quality Management Plan

The Project Quality Management Plan is intended to formalize the development, use, and documentation of quality assurance/quality control (QA/QC) processes and reporting protocols. The Project Quality Management Plan will consist of two primary sections; a QA section which will consist of developing procedures for monitoring, checking, peer reviewing, and critiquing project performance on a regular basis and a QC section which will include monitoring work efforts and results to determine if they comply with stated quality assurance standards.

The QA section will describe in detail the necessary quality standards relevant to the various study activities and determine how to implement those standards to ensure the results of the work performed will satisfy the stated performance criteria. The QA section must provide sufficient detail to demonstrate that the project technical and quality objectives are identified and agreed upon, the intended criteria and standards are appropriate for achieving study objectives, assessment procedures are sufficient for confirming that the quality needed and expected are obtained, and any limitations can be identified and documented.

QC will involve monitoring specific project results to determine if they comply with relevant quality standards, and identifying ways to eliminate causes of unsatisfactory results. It will be performed throughout the Settlement period. Project results include both product results, such as data acquisition and management and study deliverables, and project management results, such as cost and schedule performance. QC will be used to identify problems in methodology or computations and to bring out lessons learned that could help minimize future performance problems.

4.1.4 Development of Risk Management Plan

The purpose of this task is to identify any specific tasks that are likely to present critical challenges from a budgetary, scheduling, and coordination perspective. This task will focus on the development of a systematic process of planning for, identifying, analyzing, responding to, and monitoring project risk. It will involve processes, tools, and techniques that will help the Program Manager and Technical Work Group coordinators maximize the probability and consequences of positive events and minimize the

probability and consequences of adverse events. To the extent possible, the Risk Management Plan will identify potential technical risks, external risks, environmental risks, organizational risks, project management risks, landowner/right of way risks, and regulatory risks.

The Risk Management Plan will both qualitatively and quantitatively assess the significance of identified risks and develop procedures for addressing risks specific to each study area. Each Technical Work Group will develop a Risk Management Plan which will be merged into a program Risk Management Plan identifying common risks and timing and critical coordination issues.

4.1.5 Development of Program Communication Plan

This task will develop a Program Communication Plan identifying the key objectives, strategies, and timing for the generation, collection, dissemination, and storage of project information amongst the Technical Work Groups, subgroups, PMT, and APT.

The Program Communication Plan will identify external and internal communication processes as well as who will be included in the communications process, what information needs to be communicated, the interval, and the format for disseminating the information. The Program Communication Plan will include a conflict management strategy to minimize conflicts and resolve issues through efficient communication with the Settling Parties, Technical Work Group members, and other stakeholders. The conflict resolution strategy will ensure important issues are addressed in a timely, objective manner and that the Program Communication Plan will ensure an effective communication strategy is built into the program delivery process. The Program Communication Plan is a framework and should be considered a living, evolving document that will be revised over the course of the program implementation process.

4.2 Public Involvement Plan

Public involvement and outreach opportunities will be integrated into the tasks of Stage 1, guided by a Public Involvement Plan (PIP), to create an open and visible process through which the general public, stakeholders, affected Third Parties, and other interested Parties can keep track of Program activities and progress and participate in the identification of Program issues and formulation of alternatives. Components of the PIP include:

- A Program contact list of individuals, organizations, and public agencies who want to receive notifications of Program activities;
- Public workshops, co-sponsored with local organization early in the process to present the PMP and the PIP;
- Public scoping meetings to share information and receive official public comment;

- A publicly accessible, Program-specific website that offers timely information and updates, a document repository, a system of accepting and tracking public comments, a calendar of events/progress, and contact information;
- Response-to-comments system to inform those participants how input is addressed;
- E-newsletters and email updates of news, events, and opportunities for input;
- Briefings, site tours and a speaker's bureau for interest groups, water agencies and elected officials;
- News releases and media briefings;
- Fact sheets;
- Mailing/emailing database that is continually expanded; and
- Consider joint and independent public involvement activities by the implementing agencies.

4.2.1 Technical, Public and Stakeholder Participation Strategy

Public involvement and outreach opportunities will be integrated into researching, identifying, analyzing, and documenting the strategies, methodologies, and evaluation requirements necessary during Stage 1, in order to scope and develop these concept level improvements into feasible project alternatives for implementation of the Settlement, including public workshops and scoping meetings.

This task will examine requirements, potential strategies and a process plan for establishing Technical subgroup(s), Stakeholder subgroups open to the public, and/or a cooperating agency group(s) for Stage 1. This task will look at the participation strategies of other programs for potential insight on the organization, roles, and responsibilities of these groups. The result of this task will be a recommended participation strategy, a definition of the groups' roles and responsibilities, and a description of the coordination requirements from a program implementation perspective, and a discussion of the potential risks and uncertainties inherent with this strategy.

The Settlement contemplates establishing opportunities for coordination with Third Parties and other stakeholders which have facilities and property impacted by the Settlement, as well as appropriate input for stakeholders and the public. The implementing agencies will actively seek to co-sponsor Public Workshops with local organizations, in particular where landowner issues are involved. Workshops will provide focused opportunities for two-way dialogue between entities and individuals having facilities and/or property potentially impacted by the implementation of the Settlement.

Some of the anticipated stakeholder subgroups include but are not limited to:

- Reach-by-reach stakeholders
- Water Recovery Plan stakeholders
- Interim and Restoration Flow stakeholders
- Fishery Management stakeholders

- Physical Improvements stakeholders
- Environmental Compliance stakeholders

4.3 Stage 1 Tasks

This section focuses on the tasks necessary for the scoping and development of programmatic evaluation of actions required to address the Restoration Goal and the Water Management Goal. Tasks will consist of researching, identifying, analyzing, and documenting the strategies, methodologies, and evaluation requirements and procedures necessary during Stage 1 to prepare an appraisal level programmatic Initial Program Alternatives Report (IPAR). The IPAR will document the findings of the formulation and evaluation process, describe and estimate the cost of the Program alternatives for both the Water Management Goal and the Restoration Goal, identify significant data needs and analyses required during Stages 1 and 2, and lay out a strategy for the development of a detailed Fishery Management Plan. Stage 1 tasks will be used to develop a PEIS/R.

4.3.1 Alternatives Development

This task consists of researching, identifying, analyzing, and documenting the strategies, methodologies, and evaluation procedures and requirements for developing and implementing channel and structural improvements identified in Paragraph 11 of the Settlement, the Water Recapture Plan as stipulated in Paragraph 16(a) of the Settlement, and any other actions deemed necessary by the Secretary to meet the Restoration Goal (i.e. Paragraph 12 of the Settlement). Paragraph 16(a) identifies recirculation, recapture, reuse, exchanges or transfers as potential mechanisms for recovering flows released for Restoration purposes. In addition, Paragraph 16 of the Settlement stipulates “...*any recirculation, recapture, reuse, exchange or transfer of the Interim Flows and Restoration Flows shall have no adverse impact on the Restoration Goal, downstream water quality or fisheries.*” Paragraph 11 of the Settlement consists of two phase of improvements: Phase 1 which needs to be completed by not later than December 31, 2013; and Phase 2 which needs to be completed by no later than December 31, 2016.

At an appraisal/conceptual level, this task shall identify the study area, describe existing conditions, compile existing data, identify data gaps, develop a problem statement, develop a purpose and needs statement, identify problems, needs, and opportunities, define planning objectives and constraints, and define evaluation criteria and performance measures. The alternatives development will be documented in an IPAR addressing all sub-tasks identified in the task. The document will sequentially describe and diagram the entire planning process at a detail sufficient to identify the dependencies between tasks, timing of task activities, and relationships with Program Goals.

4.3.1.1 Notice of Intent and Notice of Preparation

A Notice of Intent/Notice of Preparation (NOI/NOP) will be prepared for posting and distribution to formally initiate NEPA and CEQA compliance processes, respectively.

The objective of a NOI/NOP is to meet the Federal and state legal requirements and to establish a clear path for the PEIS/R in addressing the key issues, such as alternatives, baseline, and the relationship of this PEIS/R to other planning efforts. The NOI/NOP will describe the options identified in the Settlement and the proposed planning and environmental review process as presented in this PMP. Subsequent to the filing of the NOI in the Federal Register, public scoping meetings will be held in various locations throughout the Central Valley. A summary of these scoping meetings will be documented in a Scoping Report.

4.3.1.2 Identification of Data Needs

This task will include the identification and assessment of anticipated planning, design, environmental analysis, and implementation monitoring and data collection needs for the program effort outlined in this PMP. This task must consider the data acquisition needs to meet both the restoration flow and water management objectives. Data collections programs will be identified, defined, prioritized, and implemented during the initial stage and continue throughout the course of the Settlement period. Specific areas of data collection and monitoring will focus around the needs of the Fishery Management Plan, Water Recovery Plan, Recovered Water Account, and Restoration Flow procedures and guidelines and will identify and describe critical linkages and timing considerations to meet the Settlement requirements.

- **Immediate Data Needs**

The intent of this task is the coordination of data collection and monitoring needs between the various study activities identified in this PMP. To that extent, this task will include a review of existing data developed by the work of the Settling Parties as well as an identification of the monitoring and data collection requirements stipulated in the Settlement. The purpose of this task is to determine the adequacy of the existing data to meet the needs of the four Work Groups' study requirements, identify data gaps in existing data, and develop a coordinated strategy for the collection of data and installation of monitoring stations needed to support the specific studies. The initiation of data collection through this task should include the specific data needs identified in various sections of this PMP. The Immediate Data Needs List will be distributed to the PMT by July 2007.

- **Appraisal Level Studies**

This task will identify and collect data needed to complete Stage 1 appraisal-level studies. This includes assembling and cataloging existing data consistent with study needs, exclusive of alternative specific data. The data will serve as a basis for preparing a description of existing and future without-project conditions. This task will identify gaps between data needs and data collected. When practicable, materials available electronically will be placed on the website. A scope of work and budget for filling remaining data gaps will be prepared.

- **Program and Feasibility Level Studies**

Each level of analysis will require a finer resolution of data collection and possibly additional monitoring stations. At the feasibility level of analysis, such activities may include detailed mapping for higher level of analysis that require aerial flights affected by seasonal sun angles and other factors that require early planning to get optimal data. Other field and data collection activities may include geological and geotechnical surveys of potential foundation conditions, and soil stability; biological surveys to identify species and habitats present in potentially affected areas; cultural resources surveys; and other related issues that will be evaluated in the PEIS/R. This task will be documented in a Technical Memorandum.

4.3.1.3 Development of Purpose and Need Statement

A definition of project purpose and need will be developed in consultation with Reclamation, USFWS, NMFS, DFG and DWR staff, and stakeholders. It is anticipated that this task will be iterative and developed in parallel with other plan definition tasks.

4.3.1.4 Definition of Existing and Future Without-Project Conditions

This task will prepare a description of existing conditions within the study area. The basis of this documentation will be existing literature and technical tools, interviews with technical experts and public officials, and discussions with landowners and other stakeholders. The purpose of this task is to establish a baseline condition to the extent possible, serve as a basis for defining “future without-project” conditions, and identify additional information requirements.

The scope of the task will include the physical and environmental, operational, and hydrologic settings within the study area. The physical setting will include, but is not limited to, a description of the river channel by reach, side-channels, storage and conveyance facilities, dams and diversion structures, and other elements potentially influencing flow regimes. The environmental setting should include a description of the affected resources within the study area. The operational setting will include, but is not limited to, a description of the operational framework influencing release patterns, monitoring and data collection, and other elements potentially influencing flow regimes. The hydrologic setting will include, but is not limited to, a description of the river hydrology both above and below Friant Dam, available sources of water supplies, and irrigation and M&I water demands. This task will be reliant on the work effort outlined the Recovered Water Account, which will define the baseline operation conditions for Friant Dam with and without the Restoration Flows.

Formulation and evaluation of alternative plans will be based on the conditions most likely expected to exist in the future if no Interim or Restoration Flows are released. The without-project condition is an estimate of conditions expected to prevail if no action is taken and will be used as the basis of comparison to evaluate alternatives. The without-project condition will be based on the existing conditions, but modified to include reasonable and foreseeable actions that would cause changes to the existing condition.

The results of this effort will be the definition of two existing conditions, one reflecting current Friant operations without consideration of the Restoration Flows and a second existing condition including the Restoration Flows in Friant operations and a future without-project condition. The first condition will serve as a basis for assessing project impacts and the second as a basis for measuring water recovery accomplishments. The results of this task will be documented in a Technical Memorandum for review and approval as stipulated in the program management section of this Plan.

4.3.1.5 Definition of Planning Objectives

This task will involve defining planning objectives through a coordinated effort with other agencies and stakeholders. The definition of objectives will begin with guidance provided for in the Settlement, which identifies several river improvements and includes recirculation, recapture, reuse, exchanges, and transfers as potential mechanisms for reducing or avoiding impacts.

4.3.1.6 Development of Conceptual Models

Numerous conceptual models will be developed for such topics as Chinook salmon population dynamics, water temperature, and surface and subsurface water flow regimes. These models will be integrated into more comprehensive models for management of water resources in the context of water supply, water quality and ecosystem health, reflecting our current understanding of the basic processes that drive the many components of the San Joaquin River Basin. Conceptual models are verbal or graphic depictions of how scientists believe that ecological, hydrological, and managerial systems in the San Joaquin River Basin will function and respond to Program actions. They are precursors to quantitative models and help identify actions that should have a high likelihood of achieving Program objectives and help identify key knowledge gaps and hypotheses that will be addressed by an adaptive management process. Conceptual models will provide the basis for selection of existing quantitative models that will undergo enhancement or will provide the basis for the decision to develop new quantitative models that will be appropriate for the Program. The new quantitative models will require field testing to confirm their utility. The conceptual models and subsequent numerical models will be sufficiently detailed to assist in the evaluation of programmatic alternatives.

4.3.1.7 Identification and Description of Options

Previous studies and products of ongoing activities will be reviewed to identify all potential options for consideration. Options and their potential accomplishments, adverse impacts, and costs will be described based upon existing information. This task will involve a review of assumptions used in other studies for potential application to this study.

This task will include identifying options identified in Paragraph 11 of the Settlement to meet the Restoration Goal and all potential options to meet the Water Management Goal

described in Paragraph 16. Options to be considered will include both structural and nonstructural options. Structural options may require either new facilities or physical modifications of existing facilities, and channel modifications. Nonstructural options would require modifications of existing operations and coordination, including changes to outlet works or other operational features, but would not include new or enlarged structures on the river. Other options, such as additional flood management features and channel and structural improvements not identified in Paragraph 11, but needed to meet the Restoration Goal, will also be identified under this task.

4.3.1.8 Evaluation and Comparison of Preliminary Options

A preliminary assessment of options will be completed at an appraisal-level of detail. A Technical Memorandum will be prepared which describing, for each option, the size or range of sizes of constructed facilities; site access, staging and borrow sites; environmental benefits and impacts; and total option costs will be prepared. Maps will be included showing features associated with each potential option. The Technical Memorandum will recommend options to be retained for further consideration and describe the screening process used.

Engineering Studies

The objective of this task is to obtain sufficient information to evaluate and compare potential options identified in the documentation of the project description. Primary efforts will be directed toward development of appraisal level designs and cost estimates for the options that are identified. The existing conditions data collected in previous tasks will be used to the extent possible, with supplemental site reconnaissance investigations conducted only as needed to provide sufficient information to support these activities. It is anticipated that field explorations and design data needs will be identified and assessed during Stage 1.

Environmental Analysis Strategy

The objective of Stage 1 environmental studies is to provide early information on the sensitive environmental resources in the area and the types of impacts and mitigation measures that can be expected for the preliminary options. This work will assist in the development of more detailed project descriptions necessary for the PEIS/R analyses. A Technical Memorandum will be prepared to describe the screening of initial options and environmental analysis strategy for each option considered.

Real Estate Analysis

This task describes necessary work activities during the initial phase of study (Appraisal Level) and will be documented in a Technical Memorandum, using text, diagrams, photographs, CAD and/or GIS. The necessary activities associated with real estate concerns during this phase of study include the tasks described below.

Identification and Record Management of Land Ownership Information will require a search of real estate records throughout all affected counties. Determination of land ownership data that should include the following: 1) Address and phone number of the owner; 2) Address and phone number of the tenant or manager of the property (if applicable) and indication if this person is authorized to allow Reclamation/State personnel to access the parcel; 3) Location and boundary information about the parcel; 4) Rights and obligations attached to the land (If available); and 5) Storage of this data in a GIS or other data base storage/retrieval system.

A Right of Entry (ROE) process will be required to access parcels during the investigation stage for performance of field surveys, environmental investigations, geological investigations and hydrological investigations. A simplified process should be developed that will utilize one or more standardized ROE forms. A list of responsible individuals that can sign ROEs for Reclamation and the State should be developed. The status of necessary ROE should be tracked at all times.

During this stage of the work land and rights costs will be included in the engineering appraisal level cost estimates. It is anticipated that both fee and easement takes will be required. Easements may be in the form of flood, environmental, conservation or below ground rights. Determination of engineering appraisal level cost estimate per acre costs for these takings can be approximated by a cursory review of comparable sales in the vicinity. Development of generalized and averaged per acre costs will be adequate for the purposes of the engineering appraisal-level cost estimates being prepared. It is anticipated that a more detailed analysis will be required during the feasibility level cost estimates.

4.3.1.9 Development and Evaluation of Alternatives Process

This task will develop a process for formulating options into complete initial alternatives which will address both the Restoration Goal and the Water Management Goal. An alternative may include different combinations of options functioning together to address the planning objectives.

This task will also identify a process for evaluating the accomplishments and impacts of each alternative compared to the existing and future without-project condition. The evaluation process will forecast the most likely with-project condition expected under each alternative plan. The process will identify and document evaluation criteria and assumptions used during the process. A Technical Memorandum will document the results of this task for coordinating the strategy with stakeholders.

4.3.1.10 Development of Initial Alternatives

Using the strategy developed under the identification and description of options, a list of initial alternatives will be developed. The formulation and evaluation of these alternatives will provide an understanding of how options work together at various sizes and combinations, and to identify potential system-wide affects.

A Technical Memorandum will be prepared to describe the initial alternatives and the approach to their formulation. Each initial alternative will be developed to a level of detail sufficient to support preparation of appraisal-level cost estimates. Each initial alternative will be described in a one-to-two-page format including a map; schematic diagram; narrative discussion of facilities including capacities, configurations and locations; and institutional/implementation issues. The following information will be included in the description of each conceptual alternative:

- Features: description of features included in the alternative;
- Operations: assumed operational criteria;
- Schedule: estimated time to construct and bring facility on-line;
- Land requirements: right of way requirements and feasibility of obtaining the required rights-of-way;
- Permitting requirements: list of key agencies and permits with long lead times
- Impacts: environmental, biological, cultural, socioeconomic, and recreation; preliminary assessment of mitigation measures; and
- Constructability: terrain considerations, utility requirements and impacts, staging requirements.

4.3.1.11 Preparation of Initial Program Alternatives Report

This task includes the preparation of an Initial Program Alternatives Report (IPAR) documenting present and future baseline conditions, describing initial planning objectives, opportunities and the range of complete initial alternative plans that address the planning objectives, and describing potential environmental impacts and an initial screening and comparison of alternatives. This report will be used to present to the stakeholders and public the alternatives to be considered by the program.

4.3.2 Fishery Management Plan

The San Joaquin River Restoration Program Fishery Management Plan (FMP) will provide a roadmap to adaptively manage efforts to restore and maintain naturally reproducing and self-sustaining populations of salmon and other fish in the San Joaquin River below Friant Dam to the confluence of the Merced River. The Fishery Management Work Group (FMW) began working on the FMP in February 2007 and anticipates that it will be completed by December 2008. The draft table of contents for the FMP (Attachment E) was developed based on a review of numerous fishery management plans developed for west coast salmon fisheries. The following five sections describe the steps needed to complete the plan and other fishery related Program actions.

4.3.2.1 Salmon Population Models

The FMW will first develop conceptual models that describe the habitat requirements of the various life history stages of spring-run and fall-run Chinook salmon and the likely environmental factors that will control the abundance of these species in the San Joaquin River and the extent to which these factors may control abundance. Next, quantitative models developed for Central Valley Chinook salmon populations will be reviewed to determine whether one can be modified to represent the restored populations in the San Joaquin River. Outside support will be solicited to develop quantitative models for spring-run and fall-run Chinook salmon in the San Joaquin River. The models will provide structured and quantitative tools the FMW, implementing agencies, RA and TAC, and others can use to:

- Identify and prioritize likely limiting factors that control the abundance of salmon;
- Develop population goals for spring-run and fall-run Chinook salmon and other performance measures;
- Guide habitat Restoration and flow management;
- Identify key uncertainties, data needs, and develop testable hypotheses; and
- Identify criteria for construction and operation of water management and fish protection facilities.

4.3.2.2 Development and Implementation of Work Assignments and Scopes of Work

The FMW will develop a majority of the sections in the FMP using the numerous reports on the historical and existing conditions of the fish populations, their habitats, water supply, and restoration strategies that have been provided by the Parties to the Settlement. In addition, the FMW will ensure that the existing river channel and floodplain habitats are surveyed and that the results are used to evaluate potential habitat restoration projects.

Some plan sections will be developed with the assistance of other Work Groups. For example, the PMT will provide the information for the sections on Legal and Policy Context and the Implementation Plan. The Environmental Compliance, and Permitting Work Group will provide information on the Program alternatives, impacts and benefits, formal planning steps, and the criteria used in making decisions or recommendations. The Water Management Work Group will provide information needed to develop a Fisheries Flow Management Plan. The Engineering and Design Work Group will provide information on channel and structural improvements related to fish passage and screening.

Outside support may be needed to develop quantitative models for spring-run and fall-run Chinook salmon in the San Joaquin River. The FMW will identify additional outside support needs and develop scopes of work to fulfill these needs by May 2007.

4.3.2.3 Data Needs Specific to the Fishery Management Plan

The FMW developed an immediate data needs list of information required to complete the FMP. This data needs list will be revised as new information becomes available and as Settling Parties' reference materials are reviewed and incorporated.

The preliminary immediate data needs list includes the following tasks:

- Develop a water temperature model that includes Millerton Reservoir and the bypass channels of Reach 4B by completing, and if necessary, expanding the ongoing DWR modeling effort.
- Develop quantitative population models for spring-run and fall-run Chinook salmon in the San Joaquin River by modifying existing or developing new Central Valley models. The models should integrate the existing conditions in the San Joaquin River and Delta, Restoration Flows and reservoir management, the water temperature model, potential habitat restoration, and habitat requirements of spring-run and fall-run fish. The existing conditions should include the distribution and quality of spawning habitat, holding habitat, fluvial geomorphic processes and riparian vegetation
- Assess the effects of flow magnitude and duration, water temperature, groundwater flow, unscreened diversions, contaminants, invasive non-native species, predators.
- Assess the interactions between spring-run and fall-run, harvest, juvenile food resources, Delta exports, the Head of the Old River Barrier, Delta water quality, and ocean ship traffic in the deep water ship channel.
- Collect and analyze sediment bulk samples at potential spawning habitats by evaluating the existing work by Jones & Stokes and Entrix in 2000 and 2002 and by expanding upon the DWR surveys to be conducted in Summer 2007.
- Survey the quantity and quality of spring-run holding habitat by expanding upon the DFG surveys to be conducted in Summer 2007.
- Survey the size and location of captured gravel pits.
- Develop a quantitative riparian recruitment model for the San Joaquin River.
- Evaluate the migratory behavior and habitat requirements of spring-run Chinook salmon populations to be considered as sources for reintroduction into the San Joaquin River.
- Develop models of the relationship between flow releases at Friant Dam and the area of inundated floodplain habitats for each of the five project reaches by completing the ongoing DWR modeling effort.
- Assess the effects of legal and illegal harvest of Chinook salmon and other fish.

4.3.2.4 Recommendation and Coordination of Fishery Related Planning, Modeling, or Research and Monitoring Supporting Implementation of the Restoration Goal

The following table presents ten subtasks that will require coordination between the FMW and the other Work Groups:

Table 2. Work Group Coordination

Subtask	Work Group	Start Date	End Date
1. Interim Program Alternatives Report	Environmental Compliance, & Permitting	Apr 2007	Dec 2007
2. Public Comments on FMP	Public Affairs Team	Jul 2008	Sep 2008
3. Environmental Compliance Strategy Document	Environmental Compliance, & Permitting	Feb 2007	Sep 2009
4. Assist with Completion of Environmental Compliance Documents	Environmental Compliance, & Permitting Work Group	Feb 2007	Sep 2009
5. Application for NMFS Permit to Reintroduce Chinook Salmon	Environmental Compliance, & Permitting Work Group	Dec 2007	Sep 2010
6. Communications and Outreach Plan	Public Affairs Team	Feb 2007	Dec 2025
7. Help Implement Outreach Plan	Public Affairs Team	Feb 2007	Dec 2025
8. Help Design Interim Instream Flow Studies	Water Management Work Group	Feb 2007	Oct 2009
9. Fishery Flow Schedule Refinement	Water Management Work Group	As Needed	Dec 2025
10. Habitat Restoration & Channel Improvement Planning	Engineering & Design Work Group	Feb 2007	Dec 2016
11. Infrastructure Planning to Facilitate Fisheries Monitoring and Research	Engineering & Design Work Group Environmental Compliance & Permitting Work Group	June 2007	Dec 2010

The FMW will develop a draft Work Group Coordination Plan by May 2007 that will describe how the Work Group will interface, coordinate, and communicate with other Work Groups. Four actions have been identified to facilitate Work Group coordination:

- FMW meeting notes will be distributed to other Work Groups;
- FMW team members will attend other Work Group, TAC, Third Party Group, and public outreach meetings;
- Specific data needs from other Work Groups and stakeholders, including coordinating permitting specific to Paragraph 14 in Settlement regarding the reintroduction of salmon will be identified and recommendations and coordination on any fishery planning, modeling, or research and monitoring need for effort of other Work Groups will be provided; and
- Raise significant issues to the PMT as soon as possible.

4.3.2.5 Support Permitting Specific to Paragraph 14 of the Settlement

The Fishery Management Work Group will provide information in support of the permitting process and documentation to assist USFWS and NMFS in fulfilling the requirements of Paragraph 14. It is anticipated that this information will be included in the Fishery Management Plan or accompanying supporting documents.

Paragraph 14 of the Settlement instructs USFWS to submit a completed permit application to NMFS for the reintroduction of spring-run Chinook salmon as soon as practical, but no later than September 30, 2010. NMFS shall issue a decision on the permit application as expeditiously as possible, but no later than April 30, 2012.

The FMW will coordinate with the Environmental Compliance & Permitting Work Group to develop an application and supporting documentation to be submitted to NMFS by September 30, 2010.

4.3.3 Recovered Water Account

The second major action item identified in Paragraph 16 as integral to the successful implementation of the Water Management Goal is the establishment of a Recovered Water Account and program. Paragraph 16 (b) directs the Secretary, in consultation with the Plaintiffs and Friant Parties to establish, *“a recovered water account and program to make water available to all of the Friant Division long-term contractors who provide water to meet Interim Flows or Restoration Flows for the purpose of reducing or avoiding the impact of the Interim Flows and Restoration Flows on such contractors.”* This task will identify a process and surrounding issues associated with developing and implementing a water accounting system to account for net reductions in water deliveries to such contractors and a program to make water available to Friant Division long-term contractors to reduce or avoid the impacts of Interim and Restoration Flow releases. This task will include an evaluation of similar programs and plans, development of a monitoring system, development of procedures and guidelines and computer program to document system performance before implementation of Interim and Restoration Flows, development of process and procedures for Interim and Restoration Flow management, an identification of potential water costs, development of an accounting system, and documentation of the process in a series of interim deliverables at key milestones in the overall programmatic planning effort and Recovered Water Account Report.

The Fisheries Management and Water Management Work Groups will work collaboratively on the development and implementation of the Recovered Water Account and program and assessment of potential impacts.

4.3.4 Restoration Flow Guidelines

Restoration Flows include the Base Flows and Buffer Flows described in Exhibit B of the Settlement (Attachment A), plus any additional water acquired by the Secretary from willing sellers to meet the Restoration Goal.

The processes for developing the restoration flow procedures and guidelines will include 1) examination of the existing operational criteria and procedures, 2) development of Interim and Restoration Flow guidelines, 3) evaluation of the success of the Interim and Restoration Flow implementation, and 4) establishment and management of future operational criteria. Paragraph 13(j) states: “*Prior to the commencement of the Restoration Flows as provided in this Paragraph 13, the Secretary, in consultation with the Plaintiffs and Friant Parties, shall develop guidelines, which shall include, but not be limited to:*

- *Procedures for determining water-year types and the timing of the Restoration Flows consistent with the hydrograph releases (Settlement, Exhibit B);*
- *Procedures for the measurement, monitoring and reporting of the daily releases of the Restoration Flows and the rate of flow at the locations listed in Paragraph 13(g) to assess compliance with the hydrographs (Settlement, Exhibit B) and any other applicable releases (e.g., Buffer Flows);*
- *Procedures for determining and accounting for reductions in water deliveries to Friant Division long-term contractors caused by the Interim Flows and Restoration Flows;*
- *Developing a methodology to determine whether seepage losses and/or downstream surface or underground diversions increase beyond current levels assumed in Exhibit B;*
- *Procedures for making real-time changes to the actual releases from Friant Dam necessitated by unforeseen or extraordinary circumstances; and*
- *Procedures for determining the extent to which flood releases meet the Restoration Flow hydrograph releases made in accordance with Exhibit B. Such guidelines shall also establish the procedures to be followed to make amendments or changes to the guidelines.”*

This restoration flow procedures and guidelines development task will be comprised of three phases based on the restoration flow implementation goal and time frame: 1) the Stage 1 planning period; 2) the Stage 2 Interim Flow period when hydraulic and fishery studies are implemented; and 3) Stage 3 when monitoring is conducted to determine whether the timing of the restoration flows are adequate to achieve the Restoration Goal. It is envisioned that the timing of the Restoration Flows will be adaptively managed throughout the life of the Project. The decision making and accounting process involved

in the management of the Interim and Restoration Flows including descriptions of the roles of the Settling Parties, meeting schedules, agency roles, operation decision making, and implementation criteria will be documented in a Restoration Flows Procedures and Guidelines Report. A series of interim deliverables at key milestones will be included in the overall programmatic planning effort.

4.3.5 Evaluation of Water Rights, Acquisitions, and Transfers

- Evaluation of Water Rights

This task will require a thorough evaluation of the authorized water rights for the Friant Unit of the CVP and the relationship of those water rights to State and Federal laws governing the recirculation, recapture, reuse, exchange, banking and/or transfer of CVP water. Under this task, a report will be prepared on the extent to which the authorized water rights for the Friant Unit of the CVP are consistent with and support the activities necessary for implementation of the Water Recovery Plan and overall San Joaquin River Restoration Goals. Items to be reviewed will include but not be limited to: existing places of use, existing purposes of use, seasons of diversion, and authorized quantities of diversion. The report will also identify any changes necessary to the CVP water rights and outline the process for obtaining the necessary authorizations for those changes.

The report will also identify the extent of the need for and the significance of modifying the CVP water rights to include fish and wildlife as an authorized purpose of use for FD will have with respect to accomplishing the San Joaquin River Restoration Goals. Consideration will also be given to possible Water Code Section 1707 actions to protect instream flows below Millerton and the potential for adding additional points of diversion and rediversion on the San Joaquin River below Millerton to facilitate recirculation/reuse of Friant Division water.

Additionally and to the extent that non CVP water rights are implicated in the proposed Water Recovery Plan and in meeting overall San Joaquin River Restoration Goals, the report will identify those water rights, the nature and extent of their implication, ownership of such rights and current authorized purposes and places of use, points of diversion and rediversion, and seasons of diversion. To the extent the proposed plan contains sufficient detail to allow for the necessary analysis, the report will examine how and to what extent water rights held by others (i.e., non CVP) would be voluntarily incorporated or integrated into the Water Recovery Plan and overall Restoration Goals and the extent of water right modifications that would be necessary and the process for obtaining those voluntary changes.

- Evaluation of Water Acquisition Program

After the completion of at least the initial work on evaluation of water rights and water transfer programs and opportunities, this task will require a thorough evaluation and reporting of existing long-term water acquisition programs and the effect on those programs of the SJR restoration objectives and the potential effects of the Water

Recovery Plan. Existing and active water acquisition programs include the Water Acquisition Program (WAP) which was established under CVPIA Section 3406(b)(3) to acquire water to increase instream flows for anadromous fish and to meet refuge Level 4 water needs for optimum habitat. Another existing water acquisition program is the Environmental Water Account (EWA), a CALFED program to provide water for fishery protection and to reduce impacts to agricultural, municipal, and industrial water users dependent on the Federal and State pumping facilities in the Delta.

Implementation of the proposed Water Recovery Plan may increase the competition for a resource that is already in short supply, especially in dry or below normal years when it is needed most, and will potentially result in increased costs of water for all programs. Current demands for funding of existing programs are very limited.

The report for related acquisition programs will include but not be limited to the evaluation of funding sources for the related programs and the impacts that potential SJR water acquisitions may have on those related programs.

- Evaluation of Water Transfer Programs and Opportunities

Under this task, applicable provisions of the Reclamation Reform Act (RRA) and the CVPIA, and the applicable CVP contract provisions, will be identified and evaluated as they relate to recirculation, recapture, reuse, exchange banking and/or transfer of CVP water and will report on the limitations that such laws may impose on the ability to implement the Water Recovery Plan.

FD water service contracts allow for water transfers, exchanges, and groundwater recharge and/or banking. This task will identify the anticipated transactions by which FD contractors will use transfers, exchanges, groundwater recharge and/or banking for the purpose of reducing or avoiding impacts to water deliveries to all of the FD long-term contractors caused by the Interim Flows and Restoration Flows.

Each identified mechanism will include detailed discussions on the physical actions needed to complete the transaction. The discussion will include but will not be limited to returning previously banked water to the contractor (depositor's) service area, the use of non-Federal facilities, water right actions, RRA, applicable provisions of §3405(a) of CVPIA and any applicable state law.

4.3.6 Formulation and Evaluation of Final Alternatives and PEIS/R

The first portion of this task will focus on the continued process for formulating alternatives consistent with the Restoration Goal and the Water Management Goal of the Settlement and draft language within the pending legislation, centering on the preparation of a Final Alternatives Report. This Report will describe the formulation, evaluation, and comparison of a comprehensive set of alternatives to address the planning objectives. The Final Alternatives Phase is a continuation of the development of the initial alternatives, with an intensive analysis of the initial alternatives. Analyses include

hydraulic and hydrologic modeling, feasibility level engineering designs and cost estimates, benefits estimation, preliminary environmental review and preliminary real estate cost evaluations. The basic plan formulation process will follow the steps outlined in the Federal Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (WRC, 1983) (P&G) and pertinent Federal, State, and local laws and policies. The principal planning steps are outlined below:

- Specifying water and fisheries resources problems, needs, and opportunities to be addressed;
- Inventorying, forecasting, and analyzing existing and likely future conditions in the study area;
- Developing planning objectives, constraints, considerations, and criteria;
- Identifying potential resources management measures;
- Formulating alternative plans;
- Evaluating and comparing alternative plans; and
- Selecting a plan for recommended implementation.

The iterative planning process will be led by a multiple-agency planning team of professional water resources planners, engineers, environmental scientists, fishery biologists, and related disciplines experts. It will involve the input and participation of concerned stakeholders, advisory groups, regulatory agencies, NGO's and members of the general public. Upon completion of the feasibility study, it will be documented in a Feasibility Report and accompanying PEIS/R as the basis for decision making by federal agencies, Congress, the President and state government.

4.3.6.1 Formulation of Final Alternatives

Using the Initial Alternatives Information Report as a basis for initiating the work effort, this task will develop detailed comprehensive alternatives to meet the planning objectives. This task will review the initial alternatives development process and revise existing or add new resource management measures to reflect updates in project or study area conditions. The assumptions and screening process will be reviewed and revised to reflect current conditions and new initial alternatives will be developed, if necessary. Alternatives and their potential accomplishments, adverse impacts, and costs will also be described. Descriptions of the comprehensive alternatives will define engineering features, modeling needs, fish reintroduction and summarize how the alternatives meet the Restoration Goal and the Water Management Goal.

Alternatives will include both structural and nonstructural options. Structural options would require either new facilities or physical modifications of existing facilities. Nonstructural options would require modifications of existing operations and coordination, including changes to outlet works or other operational features, but would not include new or enlarged structures on the river.

A Technical Memorandum will be prepared describing each alternative and formulation process. Each alternative description will include maps; feasibility level engineering drawings; narrative discussion of facilities including capacities, configurations and locations; and institutional/implementation constraints. The following information will be included in the description of each alternative:

- Features: Description of features included in the alternative;
- Operations and adaptive management actions: Assumed operational criteria;
- Schedule: Estimated time to construct and bring facility on-line;
- Land Requirements: Right of way requirements and feasibility of obtaining the required rights-of-way;
- Permitting Requirements: List of key agencies and permits with long lead times;
- Impacts: Environmental, fisheries (within and outside of project area), biological, cultural, socioeconomic, and recreation; preliminary assessment of mitigation measures; and
- Constructability: Terrain considerations, utility requirements and impacts, staging requirements.

4.3.6.2 Evaluation and Comparison of Final Alternatives

The evaluation and comparison of final alternatives will be similar to the process outlined in the development of the initial alternatives, but quantitatively at a level of detail sufficient to determine their feasibility. The alternatives will be evaluated and compared using the five tests of viability as defined in the P&Gs: acceptability, effectiveness, efficiency, environmental sound, and completeness. A Technical Memorandum will be prepared which describes, for each option, the size or range of sizes of constructed facilities, site access, staging and borrow sites, environmental benefits and impacts, including associated mitigation requirements, and total costs. Maps will be included showing features associated with each potential alternative.

Engineering Studies

The objective of this task is to obtain sufficient information to evaluate and compare final alternatives. Primary efforts will be directed toward development of feasibility level designs and cost estimates for the alternatives that are identified. The existing conditions data collected in previous tasks will be used to the extent possible, with supplemental site reconnaissance investigations to provide sufficient information to support these activities. It is anticipated that field explorations and design data needs will be identified and assessed during the development of the initial alternatives. It is anticipated the acquisition of data needs supporting detailed evaluation alternatives, and ultimately staged to site specific design of the Preferred Alternative, will be ongoing during Stage 2.

To the extent possible, engineering investigations will include surveying and mapping, hydrology and hydraulic studies, geotechnical investigations, site investigations, design analysis, and cost estimating in support of fish reintroduction. The amount of

engineering detail will be sufficient to support comparison of alternatives, selection of a preferred alternative, and project implementation.

It is expected that detailed studies to support site specific project implementation will be accomplished during Stage 2, following the Programmatic ROD. Cost estimates of alternatives will be based on feasibility scope quantity takeoffs required for each alternative. Alternative analysis will be at a detail great enough to effectively compare alternatives in terms of costs, benefits, and environmental, hydrologic, social, and cultural impacts.

Economic Studies

The evaluation of alternatives during this task will require economic analysis of impacts and benefits within the study area, including:

- **Economic Analysis**

This analysis includes describing benefits for use in the plan formulation process to develop the National Economic Development (NED), Regional Economic Development (RED), and Other Social Effects (OSE) accounts required under current Federal regulations. Early in this task, an appraisal-level evaluation will be conducted regarding social and economic effects of the candidate alternatives. Once this information is developed, NED, RED, and OSE accounts will be compiled and summarized comparing the various alternatives that will be considered in detail. NED, RED, and OSE accounts will be used to document tradeoffs between the alternatives. This task will also include any additional flood damage and potential flood damage reduction benefits for alternative plans considered. This will include obtaining and/or updating flood plain maps, flood hazard and damage information, and average annual flood damages as appropriate to help compare alternatives.

- **Fish and Wildlife Habitat Mitigation Costs**

These are the costs involved in implementing measures recommended to mitigate losses of fish and wildlife habitat caused by project construction, operation, maintenance, and replacement. The cost of implementation of these measures is assumed to be expended concurrently and proportionately with their related project measures.

- **Financial Analysis Report**

This task will perform any financial capability analysis to determine the capability to undertake the required financial obligations for implementation of the project. Additionally, this task will develop a financing plan displaying the ability to meet the construction cost requirements for implementing the selected plan. It will identify potential capital outlay required to implement the selected plan, and to approximate an annual schedule of expenditures.

Environmental Analysis Strategy

The objective of these environmental studies is to provide sufficient detail of sensitive environmental resources in the study area to determine the feasibility of a particular alternative. Information will include the types of impacts and mitigation measures that can be expected by the proposed actions. This work will assist in the development of the detailed project descriptions necessary for the PEIS/R analyses. For each alternative, a Technical Memorandum will be prepared describing the environmental impacts and mitigation measures for each resource considered. In addition, the Technical Memorandum will include the following:

- Description of the Study Area for environmental analyses and areas of direct and indirect impact;
- Description of data, research, and reconnaissance used to identify and analyze all potential impacts;
- Description of additional data needs;
- Description of specific studies needed for each resource area;
- Description of coordination requirements between regulatory agencies and study team;
- Estimation of time requirements for completing data collection, specific studies, and coordination;
- Regulatory compliance and a timeline; and
- The environmental quality (EQ) account non-monetary effects on significant natural and cultural resources.

Real Estate Analysis

This task describes necessary work activities required during the feasibility level stage and will be documented in a Technical Memorandum, using text, diagrams, photographs, CAD and/or GIS. The necessary activities associated with real estate concerns during this phase of study include the tasks described below.

The task associated with identification and record management of land ownership information and Rights of Entry (ROE) will continue through this stage. It is expected that the quality of the information, and the storage and management of this information will have increased. The rationale of any recommended revisions to the procedures that were developed during the appraisal level stage will be documented.

During this stage of the work, land and rights costs will be evaluated for inclusion in engineering feasibility cost estimates. Engineering and real estate studies will determine lands, easements, rights-of-way, relocations, and disposal areas necessary for project alternatives. A gross appraisal of land costs, resale values, and damages will be conducted for determination of per acre costs to be included in cost estimates for alternative plans. When determined necessary, preliminary acquisition maps showing affected ownerships and project design and mitigation requirements will be developed.

Where project waters may produce hydraulic impacts to private property or public use rights, a physical taking analysis may be required. Where owners of project affected facilities or utilities have a vested interest, a preliminary attorney's opinion of compensability evaluating the value of this interest may be required.

4.3.6.3 Preparation of Final Alternatives Report

This task will prepare a Final Alternatives Report documenting existing and future without-project conditions, qualitatively and quantitatively describe problems and needs, define planning objectives and opportunities, formulate a range of complete alternative plans addressing the planning objectives, identify and discuss environmental impacts and mitigation measures, and identify a preferred alternative that meets the Restoration Goal and the Water Management Goal. The report will be submitted in draft format for a multiple level review process including the technical team, stakeholders, PMT, TAC and RA, and the Agency Policy Review Team. A final report will be prepared addressing comments received during the draft report review process.

4.3.6.4 Collection and Analysis of Data

This task will include identification and assessment of anticipated design and environmental planning data needs. Building off of the development of initial alternatives, data collection programs will be developed and initiated. Such activities may include detailed mapping for higher level of analysis that require aerial flights affected by seasonal sun angles and other factors that require early planning to get optimal data. Other field and data collection activities may include geological and geotechnical surveys of potential foundation conditions, and soil stability; biological surveys to identify species and habitats present in potentially affected areas; cultural resources surveys; and other related issues that will be evaluated in the PEIS/R.

4.3.6.5 Preparation of Programmatic Environmental Impact Statement/Environmental Impact Report

The PEIS/R will disclose the impacts of the recommended plan and alternatives to the public in compliance with NEPA and CEQA, and provide the Federal and State decision-makers with the information necessary to make an informed decision. The PEIS/R will be prepared in coordination with the feasibility level alternatives evaluation.

The PEIS/R will be organized to comply with the content requirements of both NEPA and CEQA focusing on those actions to implement the Restoration Goal and the Water Management Goal under the Settlement in compliance with the draft legislation. The PEIS/R will evaluate and compare the impacts of the preferred alternative and other alternatives developed through the scoping process. NEPA and CEQA require consideration of a full range of reasonable alternatives. NEPA requires equivalent levels of analysis for the alternatives, while CEQA focuses on the specific components of the alternatives that can reduce or eliminate the significant impacts associated with the proposed Project.

The impact assessment will address effects related to changes in the availability of water for agricultural, urban, and environmental purposes. The geographic extent of the regional evaluations may be dependent on water release regimes in each alternative. The assessment may involve the use of computer models. The model assumptions and limitations may be documented in detail for each alternative. The identified models that may be used in the study include the CALSIM model that simulates the statewide water supply operation including the SWP and CVP. The CALSIM model may be expanded later to include FD operations with and without Restoration Flows. Regional economic impacts may be evaluated using economic analysis models currently being used in the common assumptions effort.

NEPA also requires the identification of the “environmentally preferable alternative” in the ROD. The environmentally preferable alternative is the alternative that: 1) causes the least damage to the biological and physical environment; and 2) best protects, preserves, and enhances historic, cultural, and natural resources.

The specific scope for each environmental area may be determined by the Implementing Agencies and others at the completion of the scoping process.

4.3.7 Stage 1 Milestones

Table 3. Stage 1 Milestones

Description	Deliverable Date
Program Management Plan	Apr. 2007
Notice of Intent/Notice of Preparation	June 2007
Data Needs for Appraisal Level Studies	July 2007
Existing and Future Without-Project Conditions	Aug. 2007
Scoping Report	Oct. 2007
Water Management & Fisheries Options TM	Sept. 2007
Draft Restoration Flow/Operational Guidelines	Dec. 2007
Initial Alternatives and Conceptual Model TMs	Feb. 2008
Initial Program Alternatives Report	Apr. 2008
Restoration Flow Guidelines	Apr. 2008
Draft Fishery Management Plan	Sept. 2008
Plan Formulation TM	Sept. 2008
Program Alternatives Report	Oct. 2008
Fishery Management Plan	Dec. 2008
Admin Draft PEIS/R	Jan. 2009
Draft PEIS/R	Mar. 2009
Final PEIS/R	July 2009
ROD/NOD	Sept. 2009
Initiate Interim Flows	Oct. 2009

4.4 Stage 2

Stage 2 commences in October 2009 with the release of Interim Restoration Flows and will conclude in December 2013 with the completion of Phase 1 improvements and agreement on operational guidelines. During Stage 2, an Interim Flows program will be implemented to collect relevant data concerning flows, temperatures, fish needs, seepage losses, recirculation, recapture, and reuse. Stage 2 also includes the reintroduction of spring-run and fall-run Chinook salmon and the implementation of all Phase 1 channel improvements. Public workshops and meetings will be held frequently throughout Stage 2 to keep interested members of the public apprised of the progress made toward achieving the Program Goals.

4.4.1 Interim Flow Water Management and Monitoring

Fishery and hydrological studies will be implemented during the Interim Flow releases, which are scheduled to commence no later than October 1, 2009 and continue until full Restoration Flows begin. These studies will be planned by the FMW and the Water Management Work Group during Stage 1 and described in the FMP and a Technical Memorandum that will be included in the PEIS/R. The Interim Flow and Monitoring Program will include the releasing of flows of a timing and magnitude as defined in the approximate year type hydrograph specified in the Settlement without such flows impeding or delaying completion of Phase 1 improvements or exceeding existing downstream channel capacities (Table 4). Although the Settlement stipulates that the re-introduction of Chinook will not begin until 2012, it is possible that studies in Stage 2 might involve limited releases of Chinook for specific research purposes. These limited releases might be required if the information derived is essential and could not otherwise be obtained through laboratory experimentation, hatchery rearing, out-of-the basin investigations, etc. Monitoring reports will be developed annually.

Table 4, Anticipated Interim Flow Release Schedule

Year	Release Period
2009	October 1 through November 20
2010	February 1 through December 1
2011 & 2012	Assuming in-channel construction begins by May 1, February 1 through May 1 and May 1 through September 1 to wet the channel down to the Chowchilla Bifurcation Structure to collect information regarding infiltration losses
Subsequent Years	If the highest priority channel improvements are not completed, release flows for the entire year.

4.4.2 Reintroduction of Chinook Salmon

Spring-run and fall-run Chinook salmon are to be reintroduced to the San Joaquin River between Friant Dam and the confluence with the Merced River at the earliest practical date after commencement of sufficient flows and the issuance of all necessary permits, but no later than December 31, 2012. The FMW will coordinate with other work groups to develop the USFWS application and supporting documentation for the reintroduction of spring-run Chinook salmon to be submitted to NMFS by September 30, 2010. The plan to reintroduce Chinook salmon to the river will be described in the FMP that will be included in the PEIS/R. The NMFS will be expected to issue a decision on the permit application as expeditiously as possible, but no later than April 30, 2012.

4.4.3 Implementation of Phase 1 Channel Improvements

The Engineering and Design Work Group will coordinate with the FMW and real estate specialists to develop detailed engineering designs appropriate for initiating construction contracts, complete the acquisition of temporary or permanent land easements or rights-of-way that are required for implementation, and complete the construction of all Phase 1 priority Program features identified in the Settlement. The FMW will help supervise the construction activities. Public workshops and meetings will be held frequently throughout Stage 2 to keep interested members of the public apprised of the schedule of activities and the progress made related to construction activities. Separate site-specific environmental documents will be prepared prior to initiating the detailed engineering, design, and land acquisition processes for alternatives in the PEIS/R that were not analyzed in sufficient detail to initiate construction. Stage 2 will conclude in December 2013 after all Phase 1 priority construction activities have been completed.

4.4.4 Real Estate Acquisition

This task will include general land acquisition processes, including:

- Develop an acquisition and relocation plan with proposed schedule for the project;
- Prepare surveys, legal descriptions and tract maps;
- Open escrow accounts and obtain preliminary title reports;
- Obtain preliminary opinion of title from Interior's Solicitor's Office;
- Complete necessary HAZMAT reviews;
- Develop real estate acquisition purchase agreements;
- Negotiate with landowners;
- Prepare and finalize acquisitions documents;
- Prepare certificate of inspection and possession; and
- Obtain final opinion of title from the Department of the Interior's Solicitor's Office.

Other tasks for Stage 2 will be determined in the near future.

4.4.5 Stage 2 Milestones

Table 5. Stage 2 Milestones

Milestones	Date
Initiate Interim Flows and Monitoring Program	Oct. 2009
Complete application for NMFS permit to reintroduce salmon.	Sept. 2010
NMFS issues permit to reintroduce salmon.	Apr. 2012
Reintroduce Chinook salmon	Dec. 2012
Complete all Phase 1 priority construction activities	Dec. 2013
Final Interim Flow Study Report	June 2014

4.5 Stage 3

The primary activities in Stage 3 include the release of full Restoration Flows from Friant Dam, continued implementation of the Fishery Monitoring Plan, construction of the remaining Program features that were not Phase 1 priority, and the operation and maintenance of project facilities. The full Restoration Flows shall commence no later than January 1, 2014. Public workshops and meetings will be held frequently throughout Stage 3 to keep interested members of the public apprised of the progress made towards achieving fish recovery goals. Stage 3 will conclude once all activities called for in the Settlement are completed; however, on-going operations and maintenance of facilities and structures will continue indefinitely.

4.5.1 Restoration Flows and Monitoring Programs

The Restoration Flow release schedules and the amounts of acquired water will be determined using the decision making and accounting process developed in Stage 1 and documented in a Restoration Flows Procedures and Guidelines Report. The monitoring programs described in the FMP, Recovered Water Account Plan, and the Restoration Flows Guidelines will be implemented through 2025. Monitoring reports will be developed annually.

4.5.2 Construct the Remaining Program Features

The Engineering and Design Work Group will coordinate with the FMW and Real Estate specialists to develop detailed engineering designs appropriate for initiating construction contracts, complete the acquisition of temporary or permanent land easements or rights-of-way that are required for implementation, and complete the construction of all Phase 2 priority Program features identified in the Settlement as well as additional habitat restoration actions identified in the FMP. The FMW will help supervise the construction of channel improvements and habitat restoration. Public workshops and meetings will be held frequently throughout Stage 3 to keep interested members of the public apprised of the schedule of activities and the progress made related to construction activities. Separate site-specific environmental documents will be prepared prior to initiating the detailed engineering, design, and land acquisition processes for alternatives in the PEIS/R that were not analyzed in sufficient detail to initiate construction.

4.5.3 Real Estate Acquisition

This task will include the continuation of Stage 2 real estate acquisition services previously identified.

4.5.4 Stage 3 Milestones

Table 6. Stage 3 Milestones

Milestones	Date
Restoration Flow Release Schedules	Annual
Restoration Goal Progress Reports	Annual
Recovered Water Account Progress Reports	Annual
Restoration Flow Monitoring Reports	Annual

5.0 PROGRAM COSTS AND FUNDING

5.1 Costs

During the Settlement negotiations, several estimates were prepared for implementing the actions described in Paragraph 11 of the Settlement. These estimates ranged between \$250 million and \$800 million. Early in Stage 1, a more comprehensive assessment of the actions necessary and the related costs will be completed by the implementing agencies.

5.2 Funding Sources

The following funding sources have been identified as of early 2007:

Table 7, Funding Sources

Funding Source	Program Lifetime	Annually
CVPIA Friant Surcharge ¹		\$8 million
Friant Capital Repayment ¹		\$9 million
CVPIA Restoration Funds		\$2 million
Federal Appropriation ¹	\$250 million	
CA State Bonds (2006):		
Proposition 84	\$140 million	
Proposition 1E	\$60 million	
Total	\$450 million	\$19 million

¹ Requires new Federal authorization (such as H.R. 24, the San Joaquin Restoration Settlement Act)

6.0 PROGRAM PROCEDURES

6.1 Tracking

Program progress will be tracked through a Settlement Action Matrix grid (Attachment F) that identifies actions, responsible Parties and due dates between 2006 through 2025. These action items are identified in the Settlement, the State MOU, and proposed Federal legislative language. The Matrix will be continually updated and posted on the Program website.

6.2 Annual Progress Reports

The Program Manager will submit Progress Reports to the Secretary and the Governor beginning at the end of 2008 and continuing through the life of the Restoration program. These reports will describe the progress of the program in meeting the Restoration Goal and the Water Management Goal, including physical construction and modification and water management efforts relative to the timeline established in the Settlement. It will also include a budget review and projection for the remaining life of the project.

6.3 Budgeting

It is anticipated that the implementing agencies will have different financial reporting and budgeting requirements. However the Program will develop a cross-cutting budget to track multi-agency funding contributions that includes previous year's expenditures, current year budget, and estimates for the following year's expenditures. Financial status and predictions will have a cross-cut budget that tracks the following:

- Previous expenses;
- Current and one-year projected expenses; and
- Multi-agency contributions.

6.4 Information Management

Implementation of the Program necessitates the collection, analysis, and sharing of large volumes of physical and biological measurements, analyses, and reports. A systematic approach to collecting and managing this information is imperative to maintain cost controls and maximize use of the data for implementation activities and annual management decisions. The overall objective of the Program's information management solution will be to create a comprehensive logical structure to integrate spatial (geographic) and tabular data along with photographs, reports, and graphics from a variety of sources.

A Technical Memorandum entitled "Information Management Recommendations for the San Joaquin River Restoration Program" was prepared for the PMT to consider in developing the PMP. The Technical Memorandum includes an overview of anticipated information needs, existing data collection efforts, and existing data archives. The

Technical Memorandum recommends a distributed data model structure with a central data portal (website). The primary benefits of a distributed data model are: 1) data management is retained by the groups collecting and using the data; 2) structure encourages data standardization and provides easy access to all data and analysis results; and, 3) cost effective consolidation of high level IT staff into one group. The Technical Memorandum also includes several organizational recommendations to ensure that the required coordination occurs between all groups providing and utilizing information. The organizational recommendations include establishment of an information management coordinator and Work Group, assigning a data custodian for every major dataset, and designating DWR as the IT lead for database development and systems administration.

The PMT has immediate requirements including internal sharing of organizational communications and public sharing of documents and communications. The PMT has therefore already begun development of a website to post, share and exchange this project management related information. Some draft documents will be password-protected and available to individuals and teams working on the Program. The remainder of the website will be accessible to all interested persons and will include opportunities for public comment. This project management website can either remain stand-alone or be incorporated into the central data portal when it is developed.

6.5 Document Format and Styles

Documents and publications will follow consistent document and style formats, which have yet to be developed.

7.0 REFERENCES

Anadromous Fish Conservation Act

Central Valley Project Improvement Act

Clean Water Act

Endangered Species Act

Federal Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies (WRC, 1983)

Federal Power Act

Fish & Wildlife Coordination Act

Migratory Bird Treaty Act

Natural Resources Defense Council, et al. v. Kirk Rodgers, et al, Stipulation of Settlement

SJRRP Public Involvement Plan

San Joaquin River Restoration Study Background Report (December, 2002)

Settling Parties Memorandum of Understanding (September, 2006)

Third Party MOU (February, 2007)

ATTACHMENT A

STIPULATION OF SETTLEMENT

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JARED W. HUFFMAN (SBN 148669)
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11 [Names Of Additional Counsel Appear On Signature Page]

12 UNITED STATES DISTRICT COURT
13 EASTERN DISTRICT OF CALIFORNIA
14 (SACRAMENTO DIVISION)

15 NATURAL RESOURCES DEFENSE
16 COUNCIL, *et al.*,

17 Plaintiff,

18 v.

19 KIRK RODGERS, as Regional Director of the
UNITED STATES BUREAU OF
20 RECLAMATION, *et al.*,

21 Defendants.

22 ORANGE COVE IRRIGATION DISTRICT,
23 *et al.*,

24 Defendants-Intervenors

Case No. CIV S-88-1658 LKK/GGH

**NOTICE OF LODGMENT OF
STIPULATION OF SETTLEMENT**

1 NOTICE IS HEREBY GIVEN that on September 13, 2006, Plaintiffs Natural
2 Resources Defense Council, *et al.* ("Plaintiffs"), Defendants Kirk Rodgers, *et al.* (the "Federal
3 Defendants") and Defendant Intervenors Orange Cove Irrigation District, *et al.* (the "Friant
4 Defendants") (collectively, the "Settling Parties") are lodging with the Court their Stipulation of
5 Settlement, including Exhibits A to F thereto (see Attachment 1), which provides for a global
6 resolution of all issues in this litigation. The Settling Parties soon will be filing their joint motion
7 for approval of the settlement and entry of Judgment.

8
9 Dated: September 13, 2006


10 NATURAL RESOURCES DEFENSE COUNCIL
11 SHEPPARD, MULLIN, RICHTER & HAMPTON LLP
12 ALTSHULER, BERZON, NUSSBAUM, RUBIN & DEMAIN

13 By 
14 PHILIP F. ATKINS-PATTENSON

15 Attorneys for Plaintiffs
16 Natural Resources Defense Council, *et al.*

17
18 Dated: September 13, 2006

19 UNITED STATES DEPARTMENT OF JUSTICE,
20 ENVIRONMENT AND NATURAL RESOURCES DIVISION,
21 NATURAL RESOURCE SECTION WILDLIFE AND
22 MARINE RESOURCE SECTION

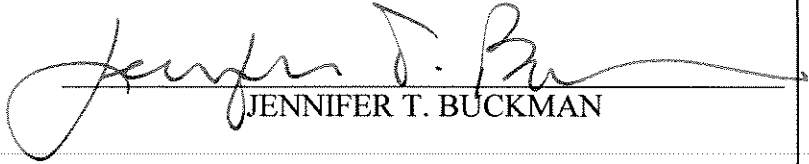
23 By 
24 STEPHEN M. MACFARLANE

25 Attorneys for Defendants
26 Kirk Rodgers, *et al.*

27
28

1 Dated: September 13, 2006

2 BEST BEST & KRIEGER LLP

3
4 By 
5 JENNIFER T. BUCKMAN

6 Attorneys for Defendants Intervenors
7 Orange Cove Irrigation District, *et al.*

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11 [Names of Additional Counsel Appear
12 On Signature Page]

13

14

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF CALIFORNIA**

15

16

17 NATURAL RESOURCES DEFENSE
COUNCIL, *et al.*,

18 Plaintiffs,

19

v.

20 KIRK RODGERS, as Regional Director
21 of the UNITED STATES BUREAU
OF RECLAMATION, *et al.*,

22 Defendants.

23

24 ORANGE COVE IRRIGATION
DISTRICT, *et al.*

25 Defendants
Intervenors.

26

27

28

Plaintiffs Natural Resources Defense Council, *et al.*, defendants Kirk Rodgers,
et al. and the defendants-intervenors Orange Cove Irrigation District, *et al.*, in that
certain litigation styled *Natural Resources Defense Council, et al. v. Rodgers, et al.*

1 No. CIV-S-88-1658-LKK/GGH, by and through their respective attorneys of record,
2 hereby stipulate and agree as follows:

3 Definitions

4 As used herein, the following terms shall have the following meanings:

5 (a) "CVPIA" shall mean the Central Valley Project Improvement Act, Public
6 Law No. 102-575, tit. XXXIV, 106 Stat. 4600, 4702 (1992).

7 (b) "Effective Date" shall mean the date the Court issues its Order
8 approving this Settlement.

9 (c) "ESA" shall mean the Endangered Species Act, 16 U.S.C. §§ 1531, *et*
10 *seq.*

11 (d) "Federal Defendants" shall mean Kirk Rodgers, as Director of the Mid-
12 Pacific Region of the United States Bureau of Reclamation, Dirk Kempthorne, as the
13 Secretary of the Interior, Carlos Gutierrez, as the Secretary of the United States
14 Department of Commerce, Rodney McInnis, as Regional Administrator of the
15 National Marine Fisheries Service, Steve Thompson, as California and Nevada
16 Operations Manager of the United States Fish and Wildlife Service.

17 (e) "Friant Division long-term contractors" shall mean the Arvin-Edison
18 Water Storage District, Chowchilla Water District, City of Fresno, City of Orange
19 Cove, City of Lindsay, County of Madera, Delano-Earlimart Irrigation District,
20 Exeter Irrigation District, Fresno County Waterworks District No. 18, Fresno
21 Irrigation District, Garfield Water District, Gravelly Ford Water District,
22 International Water District, Ivanhoe Irrigation District, Lewis Creek Water District,
23 Lindmore Irrigation District, Lindsay-Strathmore Irrigation District, Lower Tule
24 River Irrigation District, Madera Irrigation District, Orange Cove Irrigation District,
25 Porterville Irrigation District, Saucelito Irrigation District, Shafter-Wasco Irrigation
26 District, Southern San Joaquin Municipal Utility District, Stone Corral Irrigation
27 District, Tea Pot Dome Water District, Terra Bella Irrigation District, and Tulare
28 Irrigation District.

1 (f) "Friant Division long-term contracts" shall mean all long-term water
2 service contracts between Friant Division long-term contractors and the United
3 States Department of the Interior, Bureau of Reclamation existing as of June 30,
4 2006 that provide water service from the Friant Division of the Central Valley
5 Project.

6 (g) "Friant Parties" shall mean the Arvin-Edison Water Storage District,
7 Chowchilla Water District, Delano-Earlimart Irrigation District, Exeter Irrigation
8 District, Friant Water Users Authority, Ivanhoe Irrigation District, Lindmore
9 Irrigation District, Lindsay-Strathmore Irrigation District, Madera Irrigation District,
10 Orange Cove Irrigation District, Porterville Irrigation District, Saucelito Irrigation
11 District, Shafter-Wasco Irrigation District, Southern San Joaquin Municipal Utility
12 District, Stone Corral Irrigation District, Teapot Dome Water District, Terra-Bella
13 Irrigation District, and Tulare Irrigation District.

14 (h) "NEPA" shall mean the National Environmental Policy Act, 42 U.S.C.
15 §§ 4321, *et seq.*

16 (i) "Party" or "Parties" shall mean all Plaintiffs, Federal Defendants and
17 Friant Parties.

18 (j) "Plaintiffs" shall mean Natural Resources Defense Council, The Bay
19 Institute of San Francisco, Trout Unlimited of California, California Sportfishing
20 Protection Alliance, California Trout, Friends of the River, Nor-Cal Fishing Guides
21 and Sportsmen's Association, Pacific Coast Federation of Fishermen's Associations,
22 San Joaquin Raptor Rescue Center, Sierra Club, Stanislaus Audubon Society, Inc.,
23 United Anglers of California, California Striped Bass Association, and National
24 Audubon Society.

25 (k) "Restoration Fund" shall mean the San Joaquin River Restoration
26 Fund to be established by the legislation authorizing implementation of this
27 Settlement.

28

1 (l) "Secretary" shall mean the Secretary of the Interior or his or her
2 designee, unless otherwise specified.

3 (m) "Settlement" shall mean this Stipulation of Settlement, including
4 Exhibits A through F attached hereto and incorporated herein by reference.

5 **THIS SETTLEMENT**

6 1. The Court has issued Orders with respect to issues of liability
7 regarding Plaintiffs' First Claim for Relief in the Seventh Amended Complaint (for
8 violations of California Fish and Game Code § 5937 and § 8 of the Reclamation Act
9 of 1902) and issues of liability regarding Plaintiffs' Fourth, Fifth and Sixth Claims
10 for Relief (for violations of the ESA), but has not decided the issue of remedy for
11 any such violations. The Plaintiffs voluntarily dismissed their Third, Eighth and
12 portions of their Seventh (Para. 175-185) Claims for Relief with prejudice. The
13 Court has not yet ruled on the Plaintiffs' Second and remaining portions (Para.
14 186) of their Seventh Claim for Relief (for violation of NEPA and federal
15 reclamation law). The Parties have reached agreement on a global resolution of all
16 Claims for Relief in the Seventh Amended Complaint, on the terms and conditions
17 stated in this Settlement.

18 2. The Parties agree that a goal of this Settlement is to restore and
19 maintain fish populations in "good condition" in the main stem of the San Joaquin
20 River below Friant Dam to the confluence of the Merced River, including
21 naturally-reproducing and self-sustaining populations of salmon and other fish (the
22 "Restoration Goal"). The Parties also agree that a goal of this Settlement is to
23 reduce or avoid adverse water supply impacts to all of the Friant Division long-term
24 contractors that may result from the Interim Flows and Restoration Flows provided
25 for in this Settlement (the "Water Management Goal").

26 3. The Parties acknowledge that the historic operation of Friant Dam has
27 resulted in significant portions of the main stem of the San Joaquin River between
28 Friant Dam and Millerton Lake and the confluence of the Merced River being dry

1 during significant portions of the year in most years, with corresponding impacts on
2 fisheries downstream from Friant Dam. Despite the diligence of the Parties,
3 achieving all of the Restoration Goal by December 31, 2025 may not be possible.
4 Similarly, programs to achieve the Water Management Goal by December 31, 2025
5 may not achieve all of the desired results. Nonetheless, the Parties agree that
6 engaging in the restoration and water management efforts called for by this
7 Settlement are expected to provide significant public benefits beyond the
8 Restoration and Water Management Goals, including, for example, potential water
9 quality benefits downstream of the Merced River and potential increased
10 recreational opportunities, which warrant the commitment of public and private
11 resources to this Settlement.

12 4. The Parties acknowledge that, in addition to certain specified
13 obligations, this Settlement establishes a framework for accomplishing the goals of
14 this Settlement, specifically the Restoration Goal and the Water Management Goal,
15 and that the accomplishment of those goals requires the performance of activities,
16 such as environmental review, design, and construction, the details of which will be
17 developed subsequently under the terms of this Settlement. The Parties further
18 acknowledge that the implementation of this Settlement will occur over many years
19 and agree to cooperate in good faith to achieve the goals of this Settlement. The
20 Secretary shall diligently pursue implementation of the Restoration Goal and the
21 Water Management Goal as set forth in this Settlement.

22 5. The Parties acknowledge that to achieve the Restoration Goal will
23 require a combination of channel and structural improvements along the San
24 Joaquin River below Friant Dam, and releases of additional water from Friant Dam
25 to the confluence of the Merced River for restoration purposes, and funding.
26 Similarly, to achieve the Water Management Goal will require the planning,
27 implementation, and funding of measures called for in this Settlement to reduce or
28 avoid the impacts to all of the Friant Division long-term contractors caused by the

1 Restoration Flows (including, for example, recirculation programs and expanded
2 groundwater banking).

3 **Participation Of The State of California**

4 6. The Parties agree that implementation of this Settlement will require
5 the participation of the State of California. The Parties agree that implementation
6 of this Settlement shall be coordinated to the greatest extent possible with State of
7 California restoration efforts for the San Joaquin River, to the extent consistent
8 with the terms of this Settlement. Concurrently with the execution of this
9 Settlement, the State of California (by and through the California Resources
10 Agency, the Department of Water Resources (the "DWR"), the Department of Fish
11 and Game (the "DFG") and the California Environmental Protection Agency) and the
12 Parties are executing a Memorandum Of Understanding regarding the State of
13 California's role in the implementation of this Settlement.

14 7. The Parties believe that this Settlement provides numerous important
15 benefits to the State of California, including third parties located in the San Joaquin
16 River Basin or who use the waters of the San Joaquin River or the Sacramento-San
17 Joaquin Delta. The Parties neither intend nor believe that the implementation of
18 this Settlement will have a material adverse effect on any third parties or other
19 streams or rivers tributary to the San Joaquin River.

20 **Implementation Of This Settlement—Legislation**

21 8. The Parties acknowledge that certain actions to be undertaken to
22 implement this Settlement will require additional authorizations or appropriations
23 by Congress, or both. The Plaintiffs and the Friant Parties agree jointly to request
24 that legislation in the form of Exhibit A be enacted into law. The Parties intend and
25 anticipate that such legislation will provide the federal legislative authorizations
26 necessary for the Secretary to carry out the federal obligations under this
27 Settlement. In the event that legislation substantially in the form of Exhibit A is
28 not enacted into law by December 31, 2006, this Settlement is voidable at the

1 election of any Party. Before any Party may exercise its right to void this Settlement
2 in accordance with the preceding sentence, it shall provide written notice of its
3 intent to do so to the other Parties and, following receipt of such notice, the Parties
4 shall meet and confer in good faith for a period of no less than 30 days. During
5 that time, the Parties shall explore the extent to which this Settlement might be
6 modified (in accordance with Paragraph 48) to further the goals of this Settlement
7 in light of Congressional action or inaction on Exhibit A.

8 **Implementation Of This Settlement—The Restoration Goal**

9 **Channel And Structural Improvements**

10 9. The Parties agree that the channel and structural improvements listed
11 in Paragraph 11 are necessary to fully achieve the Restoration Goal. The Secretary
12 shall promptly commence activities pursuant to applicable law and provisions of
13 this Settlement to implement the improvements listed in Paragraph 11, provided
14 that funds are appropriated by Congress or available from non-federal sources for
15 that purpose. The Secretary shall diligently pursue completion of the improve-
16 ments listed in Paragraph 11 in consultation with the Restoration Administrator,
17 whose duties are defined in Paragraph 17, and with other federal, State, and local
18 agencies.

19 10. In undertaking the implementation of these improvements, the
20 Secretary may enter into such appropriate agreements, memoranda of
21 understanding, contracts, cost-sharing agreements, or other relationships with
22 applicable owners of facilities or property, State or local agencies, or other persons
23 or entities as may promote the timely and cost-effective completion of the
24 improvements. The improvements set forth in Paragraph 11 are, to the extent
25 practical, to be implemented in a way that is compatible with Paragraph 15.

26 11. The following are the necessary improvements, which shall be
27 developed and implemented in accordance with all applicable federal and state laws
28 and regulations:

1 (a) Phase 1 Improvements. The Parties anticipate that the highest
2 priority improvements as described in Paragraphs 11(a)(1) through (10) can be
3 developed and implemented in accordance with the milestone dates in the timeline
4 set forth in Exhibit C. The Secretary, however, agrees that such highest priority
5 improvements shall be completed no later than December 31, 2013, subject to
6 Paragraphs 21(c), 24, and 36 of this Settlement. If one or more force majeure
7 events under Paragraph 24 prevent the Secretary from completing any of the
8 improvements called for in Paragraphs 11(a)(1) through (10) by the date stated
9 herein, the Secretary shall, in addition to complying with the provisions of
10 Paragraph 24, follow the requirements otherwise provided for in Paragraphs 13(i)
11 and 15(d) pending completion of such improvements.

12 (1) Creation of a bypass channel around Mendota Pool to
13 ensure conveyance of at least 4,500 cfs from Reach 2B downstream to Reach 3.
14 This improvement requires construction of a structure capable of directing flow
15 down the bypass and allowing the Secretary to make deliveries of San Joaquin
16 River water into Mendota Pool when necessary;

17 (2) Modifications in channel capacity (incorporating new
18 floodplain and related riparian habitat) to ensure conveyance of at least 4,500 cfs in
19 Reach 2B between the Chowchilla Bifurcation Structure and the new Mendota Pool
20 bypass channel;

21 (3) Modifications in San Joaquin River channel capacity to
22 the extent necessary to ensure conveyance of at least 475 cfs through Reach 4B;

23 (4) Modifications at the Reach 4B headgate on the
24 San Joaquin River channel to ensure fish passage and enable flow routing of
25 between 500 cfs and 4,500 cfs into Reach 4B, consistent with any determination
26 made in Paragraph 11(b)(1);

27 (5) Modifications to the Sand Slough Control Structure to
28 ensure fish passage;

1 (6) Screening the Arroyo Canal water diversion immediately
2 upstream of Sack Dam to prevent entrainment of anadromous fish;

3 (7) Modifications at Sack Dam adequate to ensure fish
4 passage;

5 (8) Modifications to structures in the Eastside and Mariposa
6 Bypass channels, to the extent needed to provide anadromous fish passage on an
7 interim basis until completion of the Phase 2 improvements;

8 (9) Modifications in the Eastside and Mariposa Bypass
9 channels to establish a suitable low-flow channel, if the Secretary in consultation
10 with the Restoration Administrator determines that such modifications are
11 necessary to support anadromous fish migration through these channels; and

12 (10) Modifications to enable the deployment of seasonal
13 barriers to prevent adult anadromous fish from entering false migration pathways
14 in the area of Salt and Mud Sloughs.

15 (b) Phase 2 Improvements. The Parties anticipate that the
16 improvements in this Paragraph 11(b) can be developed and implemented in
17 accordance with the milestone dates in the timeline set forth in Exhibit C. The
18 Secretary, however, agrees, subject to the conditions stated in Paragraphs 11(b)(1)
19 through (4), that such improvements shall be completed no later than December
20 31, 2016, subject to Paragraphs 21(c), 24, and 36 of this Settlement. While these
21 improvements are also high priorities, it is the intent of the Parties that they shall
22 be planned and implemented in a manner that does not delay completion of the
23 Phase 1 improvements. If one or more force majeure events under Paragraph 24,
24 or interference with the completion of the improvements in Paragraph 11(a), prevent
25 the Secretary from completing such improvements by December 31, 2016, the
26 Secretary shall follow the procedures set forth in Paragraph 24.

27 (1) Modifications in San Joaquin River channel capacity
28 (incorporating new floodplain and related riparian habitat) to ensure conveyance of

1 at least 4,500 cfs through Reach 4B, unless the Secretary, in consultation with the
2 Restoration Administrator and with the concurrence of the National Marine
3 Fisheries Service (the "NMFS") and the Fish and Wildlife Service (the "FWS"),
4 determines that such modifications would not substantially enhance achievement of
5 the Restoration Goal;

6 (2) Modifications to the Chowchilla Bifurcation Structure to
7 provide fish passage and prevent entrainment if the Secretary, in consultation with
8 the Restoration Administrator and with the concurrence of the NMFS and the FWS,
9 determines that such modifications are necessary to achieve the Restoration Goal;

10 (3) Filling and/or isolating the highest priority gravel pits in
11 Reach 1 (such "highest priority gravel pits" shall be determined by the Secretary, in
12 consultation with the Restoration Administrator, based on the relative potential for
13 reducing juvenile salmon mortality); and

14 (4) Modifications to the Sand Slough Control Structure to
15 enable effective routing and conveyance of Restoration Flows of up to 4,500 cfs into
16 Reach 4B, consistent with any determination made in Paragraph 11(b)(1).

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

23 **The Restoration Flows**

24 13. In addition to the channel and structural improvements identified in
25 Paragraph 11, releases of water from Friant Dam to the confluence of the Merced
26 River shall be made to achieve the Restoration Goal as follows:

27 (a) All such additional releases from Friant Dam shall be in
28 accordance with the hydrographs attached hereto collectively as Exhibit B (the

1 “Base Flows”), plus releases of up to an additional ten percent (10%) of the
2 applicable hydrograph flows (the “Buffer Flows”) may be made by the Secretary,
3 based upon the recommendation of the Restoration Administrator to the Secretary,
4 as provided in Paragraph 18 and Exhibit B. The Base Flows, the Buffer Flows and
5 any additional water acquired by the Secretary from willing sellers to meet the
6 Restoration Goal are collectively referred to as the “Restoration Flows.” Additional
7 water acquired by the Secretary may be carried over or stored provided that doing
8 so shall not increase the water delivery reductions to any Friant Division long-term
9 contractor beyond that caused by releases made in accordance with the
10 hydrographs (Exhibit B) and the Buffer Flows.

11 (b) The Restoration Flows identified in Exhibit B include releases
12 from Friant Dam for downstream riparian interests between Friant Dam and
13 Gravelly Ford and assume the current level of downstream diversions and seepage
14 losses downstream of Gravelly Ford.

15 (c) In the event that the level of diversions (surface or
16 underground) or seepage losses increase beyond those assumed in Exhibit B, the
17 Secretary shall, subject to Paragraphs 13(c)(1) and 13(c)(2) relating to unexpected
18 seepage losses, release water from Friant Dam in accordance with the guidelines
19 provided in Paragraph 13(j) such that the volume and timing of the Restoration
20 Flows are not otherwise impaired. With respect to seepage losses downstream of
21 Gravelly Ford that exceed the assumptions in Exhibit B (“Unexpected Seepage
22 Losses”), the Parties agree that any further releases or transfers within the
23 hydrograph required by this Paragraph 13(c) and implementation of the measures
24 set forth in Paragraphs 13(c)(1) and 13(c)(2) shall not increase the water delivery
25 reductions to any Friant Division long-term contractor beyond that caused by
26 releases made in accordance with the hydrographs (Exhibit B) and Buffer Flows.
27 The measures set forth in Paragraphs 13(c)(1) and 13(c)(2) shall be the extent of the
28 obligations of the Secretary to compensate for Unexpected Seepage Losses. The

1 Secretary shall follow the procedures set forth in Paragraphs 13(c)(1) and 13(c)(2) to
2 address Unexpected Seepage Losses:

3 (1) In preparation for the commencement of the Restoration
4 Flows, the Secretary initially shall acquire only from willing sellers not less than
5 40,000 acre feet of water or options on such quantity of water prior to the
6 commencement of full Restoration Flows as provided in Paragraph 13(i), which
7 amount the Secretary shall utilize for additional releases pursuant to this
8 Paragraph 13(c)(1), unless the Restoration Administrator recommends that a lesser
9 amount is required.

10 (2) The Secretary shall take the following steps, in the
11 following order, to address Unexpected Seepage Losses:

12 (A) First, use any available, unstorable water not
13 contracted for by Friant Division long-term contractors;

14 (B) Next, use water acquired from willing sellers,
15 including any such water that has been stored or carried over, until it has been
16 exhausted. This Paragraph 13(c)(2)(B) shall be implemented as follows:

17 (i) The Secretary shall first use water acquired
18 pursuant to Paragraph 13(c)(1) until such water is exhausted. Thereafter, as of
19 January 1st of each year, the Secretary shall have available at least 28,000 acre feet
20 of water acquired only from willing sellers, or options on such quantity of water
21 from willing sellers, which amount the Secretary shall utilize for additional releases
22 pursuant to this Paragraph 13(c)(2)(B)(i). However, the Restoration Administrator
23 may recommend that an additional amount, not to exceed 10,000 acre feet is
24 needed; and the Secretary shall acquire up to that amount recommended by the
25 Restoration Administrator only from willing sellers, or options on such quantity of
26 water from willing sellers;

27 (ii) Any water acquired from willing sellers
28 pursuant to this Paragraph 13(c)(2)(ii) that is not used in a given year shall be

1 stored, to the extent such storage is reasonably available, to assist in meeting the
2 Restoration Goal;

3 (iii) In the event the Secretary has acquired
4 water from willing sellers under this Settlement that the Restoration Administrator
5 recommends is no longer necessary to address Unexpected Seepage Losses, such
6 water shall be available to augment the Restoration Flows;

7 (iv) The Secretary shall provide notice to the
8 Plaintiffs and Friant Parties not later than December 1 of each year regarding the
9 status of acquisitions of water from willing sellers pursuant to the provisions of this
10 Paragraph 13(c);

11 (C) Next, if the Restoration Administrator
12 recommends it and the Secretary determines it to be practical, acquire additional
13 water only from willing sellers, in an amount not to exceed 22,000 acre feet;

14 (D) Next, in consultation with the Restoration
15 Administrator and NMFS and consistent with Exhibit B, transfer water from within
16 the applicable hydrograph for that year;

17 (E) Next, in consultation with the Restoration
18 Administrator, use any available Buffer Flows for that year.

19 (d) Notwithstanding Paragraphs 13(a), (b), and (c), the Parties
20 acknowledge that flood control is a primary authorized purpose of Friant Dam, that
21 flood flows may accomplish some or all of the Restoration Flow purposes to the
22 extent consistent with the hydrographs in Exhibit B and the guidelines developed
23 pursuant to Paragraph 13(j), and further acknowledge that there may be times
24 when the flows called for in the hydrographs in Exhibit B may be exceeded as a
25 result of operation of Friant Dam for flood control purposes. Nothing in this
26 Settlement shall be construed to limit, affect, or interfere with the Secretary's ability
27 to carry out such flood control operations.

28 (e) Notwithstanding Paragraphs 13(a), (b), and (c), the Secretary

1 may temporarily increase, reduce, or discontinue the release of water called for in
2 the hydrographs shown in Exhibit B for the purpose of investigating, inspecting,
3 maintaining, repairing, or replacing any of the facilities, or parts of facilities, of the
4 Friant Division of the Central Valley Project (the "CVP"), necessary for the release of
5 such Restoration Flows; however, except in cases of emergency, prior to taking any
6 such action, the Secretary shall consult with the Restoration Administrator
7 regarding the timing and implementation of any such action to avoid adverse effects
8 on fish to the extent possible. The Secretary shall use reasonable efforts to avoid
9 any such increase, reduction, or discontinuance of release. Upon resumption of
10 service after any such reduction or discontinuance, the Secretary, in consultation
11 with the Restoration Administrator, shall release, to the extent reasonably
12 practicable, the quantity of water which would have been released in the absence of
13 such discontinuance or reduction when doing so will not increase the water delivery
14 reductions to any Friant Division long-term contractors beyond what would have
15 been caused by releases made in accordance with the hydrographs (Exhibit B) and
16 Buffer Flows.

17 (f) The Parties agree to work together in identifying any increased
18 downstream surface or underground diversions and the causes of any seepage
19 losses above those assumed in Exhibit B and in identifying steps that may be taken
20 to prevent or redress such increased downstream surface or underground
21 diversions or seepage losses. Such steps may include, but are not limited to,
22 consideration and review of appropriate enforcement proceedings.

23 (g) The Restoration Flows will be measured at not less than the
24 following six locations between Friant Dam and the confluence of the Merced River,
25 and the measurements will be monitored to ensure compliance with the hydrograph
26 releases (Exhibit B) and any other applicable flow releases (*e.g.*, Buffer Flows): (i) at
27 or immediately below Friant Dam (designated as "Friant Release" on the applicable
28 hydrograph); (ii) Gravelly Ford (designated as "Reach 2" on the applicable

1 hydrograph); (iii) immediately below the Chowchilla Bifurcation Structure
2 (designated as "Reach 3" on the applicable hydrograph); (iv) below Sack Dam
3 (designated as "Reach 4" on the applicable hydrograph); (v) top of Reach 4B
4 (designated as "Reach 5" on the applicable hydrograph); and (vi) at the confluence
5 of the Merced River (designated as "Confluence" on the applicable hydrograph).

6 (h) Subject to existing downstream diversion rights, the Parties
7 intend that the Secretary, in cooperation with the Plaintiffs and Friant Parties,
8 shall, to the extent permitted by applicable law and to meet the Restoration Goal
9 and Water Management Goal, retain, acquire, or perfect all rights to manage and
10 control all Restoration Flows and all Interim Flows (as provided in Paragraph 15)
11 from Friant Dam to the Sacramento-San Joaquin Delta; provided, however, that
12 neither the Restoration Flows nor the Interim Flows shall be credited against the
13 Secretary's obligations under CVPIA § 3406(b)(2). In addition, to the extent
14 permitted by applicable law and with the cooperation of the other Parties hereto, the
15 Secretary agrees to undertake all reasonable measures to protect such rights to
16 manage and control Restoration Flows and Interim Flows, including requesting
17 necessary permit modifications and initiation of any appropriate enforcement
18 proceedings to prevent unlawful diversions of or interference with Restoration Flows
19 and Interim Flows.

20 (i) The Secretary shall commence the Restoration Flows at the
21 earliest possible date, consistent with the Restoration Goal, and the Restoration
22 Administrator shall recommend to the Secretary the date for commencement of the
23 Restoration Flows. In recommending the date for commencement of the
24 Restoration Flows, the Restoration Administrator shall consider the state of
25 completion of the measures and improvements identified in Paragraph 11(a);
26 provided, however, that the full Restoration Flows shall commence on a date certain
27 no later than January 1, 2014. If, for any reason, full Restoration Flows are not
28 released in any year beginning January 1, 2014, the Secretary shall release as

1 much of the Restoration Flows as possible, in consultation with the Restoration
2 Administrator, in light of then existing channel capacity and without delaying
3 completion of the Phase 1 improvements. In addition, the Secretary, in
4 consultation with the Restoration Administrator, shall use the amount of the
5 Restoration Flows not released in any such year by taking one or more of the
6 following steps that best achieve the Restoration Goal, as determined by the
7 Secretary, in such year or future years:

8 (1) First, if practical, enter into mutually acceptable
9 agreements with Friant Division long-term contractors to (A) bank, store, or
10 exchange such water for future use to supplement future Restoration Flows, or (B)
11 transfer or sell such water and deposit the proceeds of such transfer or sale into
12 the Restoration Fund created by this Settlement; or

13 (2) Enter into mutually acceptable agreements with third
14 parties to (A) bank, store, or exchange such water for future use to supplement
15 future Restoration Flows, or (B) transfer or sell such water and deposit the proceeds
16 of such transfer or sale into the Restoration Fund created by this Settlement; or

17 (3) Release the water from Friant Dam during times of the
18 year other than those specified in the applicable hydrograph as recommended by
19 the Restoration Administrator, subject to flood control, safety of dams and
20 operations and maintenance requirements.

21 The Secretary shall not undertake any action pursuant to
22 Paragraphs 13(i)(1) through 13(i)(3) that increases the water delivery reductions to
23 any Friant Division long-term contractor beyond what would have been caused by
24 releases in accordance with the hydrographs (Exhibit B).

25 (j) Prior to the commencement of the Restoration Flows as
26 provided in this Paragraph 13, the Secretary, in consultation with the Plaintiffs and
27 Friant Parties, shall develop guidelines, which shall include, but not be limited to:
28 (i) procedures for determining water-year types and the timing of the Restoration

1 Flows consistent with the hydrograph releases (Exhibit B); (ii) procedures for the
2 measurement, monitoring and reporting of the daily releases of the Restoration
3 Flows and the rate of flow at the locations listed in Paragraph 13(g) to assess
4 compliance with the hydrographs (Exhibit B) and any other applicable releases (*e.g.*,
5 Buffer Flows); (iii) procedures for determining and accounting for reductions in
6 water deliveries to Friant Division long-term contractors caused by the Interim
7 Flows and Restoration Flows; (iv) developing a methodology to determine whether
8 seepage losses and/or downstream surface or underground diversions increase
9 beyond current levels assumed in Exhibit B; (v) procedures for making real-time
10 changes to the actual releases from Friant Dam necessitated by unforeseen or
11 extraordinary circumstances; and (vi) procedures for determining the extent to
12 which flood releases meet the Restoration Flow hydrograph releases made in
13 accordance with Exhibit B. Such guidelines shall also establish the procedures to
14 be followed to make amendments or changes to the guidelines.

15 **Reintroduction Of Salmonids**

16 14. The Parties acknowledge that spring run and fall run Chinook salmon
17 have been largely extirpated from the San Joaquin River upstream of the
18 confluence with the Merced River. Accordingly, the Restoration Goal of this
19 Settlement shall include the reintroduction of spring run and fall run Chinook
20 salmon to the San Joaquin River between Friant Dam and the confluence with the
21 Merced River by December 31, 2012, consistent with all applicable law. The Parties
22 agree that the following steps shall be taken in furtherance of the goal of
23 reintroducing salmonids to the San Joaquin River:

24 (a) The Secretary, through the FWS, and in consultation with the
25 Secretary of Commerce, the DFG, and the Restoration Administrator, shall ensure
26 that spring and fall run Chinook salmon are reintroduced at the earliest practical
27 date after commencement of sufficient flows and the issuance of all necessary
28 permits. In the event that competition, inadequate spatial or temporal segregation

1 or other factors determined to be beyond the control of the Parties make achieving
2 the Restoration Goal for both spring run and fall run Chinook salmon infeasible,
3 then priority shall be given to restoring self-sustaining populations of wild spring
4 run Chinook salmon. The FWS shall submit a completed permit application to the
5 NMFS for the reintroduction of spring run Chinook salmon as soon as practical but
6 no later than September 30, 2010. The NMFS shall issue a decision on the permit
7 application for the reintroduction of spring run Chinook salmon as expeditiously as
8 possible but no later than April 30, 2012. The Parties anticipate that NMFS will
9 provide exemption for incidental take as appropriate as part of a biological opinion
10 or opinions addressing implementation of the Settlement. The Parties anticipate
11 that NMFS will also address incidental take issues as appropriate through the other
12 authorities available under the ESA, including Section 4(d) rules and the public
13 processes required for Section 10 permits.

14 (b) As provided in Exhibit D, the Restoration Administrator shall
15 provide the Secretary with recommendations designed to reintroduce spring run
16 and fall run Chinook salmon consistent with this Settlement. The Secretary shall
17 include these recommendations in planning and decision-making to achieve the
18 Restoration Goal. In the event the Secretary declines to follow the
19 recommendations of the Restoration Administrator as provided in this Paragraph
20 14(b), the Secretary shall provide the Restoration Administrator with an explanation
21 in writing.

22 **Interim Research Program And Releases**

23 15. Prior to the commencement of full Restoration Flows pursuant to this
24 Settlement, the Parties agree that the Secretary shall begin a program of interim
25 flows, which will include releases of additional water from Friant Dam commencing
26 no later than October 1, 2009, and continuing until full Restoration Flows begin.
27 Flows released according to the provisions of this Paragraph 15 shall be referred to
28 as "Interim Flows." The Restoration Administrator, in consultation with the

1 Technical Advisory Committee, the Secretary, and other appropriate federal, State
2 and local agencies, shall develop and recommend to the Secretary implementation
3 of a program of Interim Flows in order to collect relevant data concerning flows,
4 temperatures, fish needs, seepage losses, recirculation, recapture and reuse. Such
5 program shall include releasing the flows identified in Exhibit B for the appropriate
6 year type to the extent that such flows would not impede or delay completion of the
7 measures specified in Paragraph 11(a), or exceed existing downstream channel
8 capacities. To the extent that any gauging locations identified in Paragraph 13(g)
9 are not available to measure flows due to in-channel construction related to
10 Paragraph 11 improvements and until such gauging locations are installed, Interim
11 Flows will be measured by establishing any necessary temporary gauging locations
12 or by manual flow measurements for the purposes of collection of relevant data.
13 The Parties anticipate that a program of Interim Flows would include:

14 (a) In 2009, release flows from October 1 through November 20 of a
15 timing and magnitude as defined in the appropriate year type hydrograph specified
16 in Exhibit B, and without exceeding the then existing channel capacities;

17 (b) In 2010, release flows from February 1 through December 1 of a
18 timing and magnitude as defined by Exhibit B for the appropriate year type, and
19 without exceeding the then existing channel capacities;

20 (c) In 2011 and 2012, assuming in-channel construction begins
21 May 1, release flows from February 1 through May 1 of a timing and magnitude as
22 defined by Exhibit B for the appropriate year type, and without exceeding the then
23 existing channel capacities. From May 1 through September 1, release flows to wet
24 the channel down to the Chowchilla Bifurcation Structure to collect information
25 regarding infiltration losses; and

26 (d) In subsequent years, if the highest priority channel
27 improvements identified in Paragraph 11(a) are not completed, release flows for the
28 entire year of a timing and magnitude as defined by Exhibit B for the appropriate

1 year type, without exceeding the then existing channel capacities or interfering with
2 any remaining in-channel construction work on the highest priority Paragraph 11
3 improvements.

4 (e) For purposes of implementing the Interim Flows specified in
5 15(a) through 15(d), the Secretary, in consultation with the Restoration
6 Administrator, shall determine the then existing channel capacity and impact of
7 Interim Flows on channel construction work.

8 **Implementation Of This Settlement—The Water Management Goal**

9 16. In order to achieve the Water Management Goal, immediately upon the
10 Effective Date of this Settlement, the Secretary, in consultation with the Plaintiffs
11 and Friant Parties, shall commence activities pursuant to applicable law and
12 provisions of this Settlement to develop and implement the following:

13 (a) A plan for recirculation, recapture, reuse, exchange or transfer
14 of the Interim Flows and Restoration Flows for the purpose of reducing or avoiding
15 impacts to water deliveries to all of the Friant Division long-term contractors caused
16 by the Interim Flows and Restoration Flows. The plan shall include provisions for
17 funding necessary measures to implement the plan. The plan shall:

18 (1) ensure that any recirculation, recapture, reuse, exchange
19 or transfer of the Interim Flows and Restoration Flows shall have no adverse impact
20 on the Restoration Goal, downstream water quality or fisheries;

21 (2) be developed and implemented in accordance with all
22 applicable laws, regulations and standards. The Parties agree that this Paragraph
23 16 shall not be relied upon in connection with any request or proceeding relating to
24 any increase in Delta pumping rates or capacity beyond current criteria existing as
25 of the Effective Date of this Settlement;

26 (3) be developed and implemented in a manner that does not
27 adversely impact the Secretary's ability to meet contractual obligations existing as
28 of the Effective Date of this Settlement; and

1 (4) the plan shall not be inconsistent with agreements
2 between the United States Bureau of Reclamation and the California Department of
3 Water Resources existing on the Effective Date of this Settlement, with regard to
4 operation of the CVP and State Water Project.

5 (b) A Recovered Water Account (the "Account") and program to
6 make water available to all of the Friant Division long-term contractors who provide
7 water to meet Interim Flows or Restoration Flows for the purpose of reducing or
8 avoiding the impact of the Interim Flows and Restoration Flows on such
9 contractors. In implementing this Account, the Secretary shall:

10 (1) Monitor and record reductions in water deliveries to
11 Friant Division long-term contractors occurring as a direct result of the Interim
12 Flows and Restoration Flows that have not been replaced by recirculation,
13 recapture, reuse, exchange or transfer of Interim Flows and Restoration Flows or
14 replaced or offset by other water programs or projects undertaken or funded by the
15 Secretary or other Federal Agency or agency of the State of California specifically to
16 mitigate the water delivery impacts caused by the Interim Flows and Restoration
17 Flows ("Reduction in Water Deliveries"). For purposes of this Account, water
18 voluntarily sold to the Secretary either to mitigate Unexpected Seepage Losses or to
19 augment Base Flows by any Friant Division long-term contractor shall not be
20 considered a Reduction in Water Delivery caused by this Settlement. The Account
21 shall establish a baseline condition as of the Effective Date of this Settlement with
22 respect to water deliveries for the purpose of determining such reductions. The
23 balance of any Friant Division long-term contractor in the Account shall be
24 annually adjusted in accordance with the provisions of this Paragraph 16(b)(1) and
25 of Paragraph 16(b)(2). Each Friant Division long-term contractor's account shall
26 accrue one acre foot of water for each acre foot of Reduction in Water Deliveries. In
27 those years when, pursuant to Paragraphs 13(a) and 18, the Secretary, in
28 consultation with the Restoration Administrator, determines to increase releases to

1 include some or all of the Buffer Flows, Friant Division long-term contractors shall
2 accrue into their account one and one quarter acre foot of water for each acre foot
3 of Reduction in Water Deliveries;

4 (2) Make water available as herein provided to all of the
5 Friant Division long-term contractors who experience a Reduction in Water
6 Deliveries as a direct result of the release of Interim Flows and Restoration Flows as
7 reflected in their Account maintained pursuant to Paragraph 16(b)(1). Water shall
8 be made available only in wet hydrologic conditions when water is not needed for
9 the Interim Flows and Restoration Flows as provided for in this Settlement, to meet
10 Friant Division long-term contract obligations, or to meet other contractual
11 obligations of the Secretary existing on the Effective Date of this Settlement, as
12 determined by the Secretary;

13 (3) Make water available to the Friant Division long-term
14 contractors pursuant to Paragraph 16(b)(2) at the total cost of \$10.00 per acre foot,
15 which amounts shall be deposited into the Restoration Fund to be established by
16 the legislation authorizing implementation of this Settlement;

17 (4) Ensure that recovery of the costs of any new CVP
18 facilities for storage or conveyance of CVP water is not determined according to the
19 provisions of this Paragraph 16; and

20 (5) Implement the Account and program developed pursuant
21 to this Paragraph in accordance with all applicable laws, regulations and standards.

22 **Implementation Of This Settlement**

23 **The Restoration Administrator And Technical Advisory Committee**

24 17. The Parties agree that a Restoration Administrator shall be selected to
25 assist the Parties in the implementation of this Settlement. The Restoration
26 Administrator shall have only those powers and duties as are specified in this
27 Settlement, including Exhibits hereto. The Plaintiffs and the Friant Parties agree to
28 the establishment of a Technical Advisory Committee to assist and advise the

1 Restoration Administrator regarding the implementation of this Settlement. In
2 carrying out all of the duties specified in this Settlement and Exhibit D, the
3 Restoration Administrator shall consult with the Technical Advisory Committee in a
4 manner consistent with the nature and time of the specific task.

5 18. The selection and duties of the Restoration Administrator and the
6 Technical Advisory Committee are set forth in this Settlement and Exhibit D.

7 Consistent with Exhibit B, the Restoration Administrator shall make
8 recommendations to the Secretary concerning the manner in which the
9 hydrographs shall be implemented and when the Buffer Flows are needed to help in
10 meeting the Restoration Goal. In making such recommendations, the Restoration
11 Administrator shall consult with the Technical Advisory Committee, provided that
12 members of the Technical Advisory Committee are timely available for such
13 consultation. The Secretary shall consider and implement these recommendations
14 to the extent consistent with applicable law, operational criteria (including flood
15 control, safety of dams, and operations and maintenance), and the terms of this
16 Settlement. Except as specifically provided in Exhibit B, the Restoration
17 Administrator shall not recommend changes in specific release schedules within an
18 applicable hydrograph that change the total amount of water otherwise required to
19 be released pursuant to the applicable hydrograph (Exhibit B) or which increase the
20 water delivery reductions to any Friant Division long-term contractors.

21 19. (a) In implementing this Settlement, the Secretary shall develop, as
22 appropriate, procedures for coordinating technical assistance, regulatory
23 compliance, and sharing of information with other Federal agencies and State
24 agencies with resource management or regulatory responsibilities related to the
25 Restoration Goal, as well as with the Restoration Administrator and Technical
26 Advisory Committee. The Secretary, or the Secretary of Commerce as appropriate,
27 shall designate staff from the Bureau of Reclamation, the FWS, and the NMFS to act
28 as liaisons to the Technical Advisory Committee. The Secretary, or the Secretary of

1 Commerce as appropriate, shall also designate staff from the aforementioned
2 agencies and other agencies as appropriate, and may create agency teams,
3 committees or working groups to provide assistance in the implementation of the
4 Restoration and Water Management Goals, including assistance to the Restoration
5 Administrator and the Technical Advisory Committee. The Secretary may also enter
6 into memoranda of understanding or agreements, as appropriate, to facilitate
7 implementation of this Settlement.

8 (b) The Secretary, with cooperation of the other Parties, shall
9 provide appropriate opportunities for input from third parties who have an interest
10 in measures to be undertaken pursuant to this Settlement, and for coordination
11 with third parties who own or control facilities or property affected by
12 implementation of such measures. Further, the Secretary, with cooperation of the
13 other Parties, shall provide appropriate opportunities for public participation
14 regarding implementation of this Settlement.

15 **Changes To The Restoration Flows**

16 20. Prior to December 31, 2025, the Restoration Flows shall not be
17 changed from those provided under this Settlement unless augmented by water
18 acquired by the Secretary from willing sellers through voluntary acquisitions, or a
19 different level of Restoration Flows is agreed to in writing signed on behalf of all the
20 Parties hereto. After December 31, 2025, the Restoration Flows provided under
21 this Settlement shall not be changed except by a written agreement signed on
22 behalf of all the Parties, acquisition of water from willing sellers, or a final
23 recommendation by the SWRCB and a final Order of this Court.

24 (a) After December 31, 2025, and prior to July 1, 2026, any Party
25 may file a motion in this action in the United States District Court for the Eastern
26 District of California (Sacramento Division), to request an increase, decrease or
27 material change in the quantity and/or timing of the Restoration Flows. If after
28 July 1, 2026 any Party seeks such relief, it shall file a new action seeking relief in

1 the United States District Court for the Eastern District of California (Sacramento
2 Division). Whether by motion or a new action, the Party seeking such relief shall
3 request the Court to order a reference to the SWRCB to make any necessary
4 findings or determinations including, but not limited to all findings and
5 determinations specified in Paragraph 20(d), relevant to the request for a change in
6 the Restoration Flows.

7 (b) The proceeding before the SWRCB shall be governed by the
8 applicable provisions of California law governing quasijudicial proceedings. The
9 Parties expect that the costs of the proceeding before the SWRCB shall be absorbed
10 by the water rights fees paid by Friant Division long-term water contractors to the
11 SWRCB.

12 (c) Review of any recommendation by the SWRCB concerning a
13 change in the Restoration Flows shall be governed by the applicable rules and
14 procedures of this Court.

15 (d) The evaluation of a requested change in the Restoration Flows
16 shall be made in light of all of the following factors:

17 (1) The extent of implementation of this Settlement, and the
18 extent of success of the Restoration Flows and the other non-flow restoration
19 measures taken pursuant to this Settlement in achieving the Restoration Goal. For
20 purposes of such evaluation, in addition to any other applicable legal requirements,
21 the following criteria shall be considered: (A) the extent of progress in the
22 achievement of the Restoration Goal, and whether additional flows will assist in
23 achieving the Restoration Goal or maintaining fish in "good condition"; (B) beginning
24 7 years after the reintroduction of spring run chinook salmon to the San Joaquin
25 River, whether the annual escapement of wild spring run adult salmon has dropped
26 below 500 in any year; and (C) the likely effect of any requested change in the
27 Restoration Flows on the achievement of the Restoration Goal:
28

1 (2) The extent of success in meeting the Water Management
2 Goal:

3 (3) The reasonableness of the requested action in light of the
4 provisions of Article 10, Section 2, of the California Constitution:

5 (4) The effectiveness of the restoration measures provided
6 for in this Settlement in achieving the Restoration Goal, the progress of the channel
7 and structural improvements identified in Paragraph 11 (or other improvements
8 that may be performed), the progress of the implementation of a plan for
9 recirculation, recapture, reuse, exchange or transfer of the Restoration Flows for the
10 purpose of reducing or avoiding impacts to the Friant Division long-term
11 contractors caused by the Restoration Flows, the effect of any unforeseen obstacles
12 to achievement of the Restoration Goal, and the likely effectiveness of any proposed
13 change in the Restoration Flows in achieving the Restoration Goal:

14 (5) The effects, including benefits and impacts, of the
15 Restoration Flows on downstream environmental conditions and the likely effect on
16 such downstream environmental conditions of any change to the Restoration Flows:
17 and

18 (6) The likely economic effects, including benefits and
19 impacts, of the Restoration Flows and any requested change in the Restoration
20 Flows, including direct impacts on lands currently served with San Joaquin River
21 water, indirect third party impacts, changes in costs of water supplies, potential
22 cropping shifts, benefits to downstream farmers and communities, and improved
23 water quality benefits for all persons and entities using or receiving benefits from
24 the San Joaquin River system.

25 **The Funding Plan**

26 21. The implementation of this Settlement shall be funded as follows:

27 (a) Federal Funding Contributions. Pursuant to CVPIA § 3406(c), all
28 entities who receive water from the Friant Division of the CVP are currently

1 assessed a surcharge of \$7.00 per acre-foot for all CVP water delivered in lieu of
2 providing water to implement the CVPIA, in addition to all other applicable charges.
3 Additionally, pursuant to CVPIA § 3407(d)(2)(a), all entities who receive water from
4 the Friant Division and Hidden and Buchanan Units of the CVP are currently
5 assessed a per acre foot restoration charge for all CVP water delivered to them for
6 deposit in the CVPIA Restoration Fund for the purpose of implementing the CVPIA.

7 (1) At the beginning of the fiscal year following enactment of
8 legislation substantially in the form of Exhibit A, the Secretary shall dedicate all
9 such surcharge payments made by such entities pursuant to CVPIA § 3406(c)(1),
10 either directly or as a revenue stream to support a bond issue, federally guaranteed
11 loan or other appropriate financing instrument, to be issued or entered into by an
12 appropriate public agency or subdivision of the State of California, and shall also
13 allocate annually up to two million dollars (\$2,000,000) (October 2006 price levels)
14 of the restoration charges paid by such entities pursuant to CVPIA §3407(d)(2)(a) for
15 the purpose of implementing this Settlement.

16 (2) From the fiscal year following enactment of legislation
17 substantially in the form of Exhibit A, and continuing for nine (9) fiscal years
18 thereafter, the Secretary shall dedicate the capital component of payments made by
19 the Friant Division long-term contractors pursuant to long-term water service
20 contracts, if not otherwise needed to cover CVP operation and maintenance costs,
21 either directly or as a revenue stream to support a bond issue, federally guaranteed
22 loan or other appropriate financing instrument, to be issued or entered into by an
23 appropriate public agency or subdivision of the State of California for the purpose of
24 implementing this Settlement. It is the intent of the Parties that the capital
25 repayment obligations of such contractors under such contracts shall be credited by
26 the amount paid into the Fund authorized by the legislation (Exhibit A).

27 (3) To the extent the Secretary determines to utilize some of
28 the funds identified in Paragraphs 21(a)(1) and 21(a)(2) as a revenue stream to

1 support a bond issue, federally guaranteed loan or other appropriate financing
2 instrument, to be issued or entered into by an appropriate public agency or
3 subdivision of the State of California for the purpose of implementing this
4 Settlement, the Secretary may enter into specific agreements with such appropriate
5 public agency or subdivision of the State of California that sets forth the terms and
6 conditions of such bond issue, federally guaranteed loan or other appropriate
7 financing instrument. The Secretary may also utilize a portion of the funds
8 collected pursuant to Paragraphs 21(a)(1) and 21(a)(2) to create a sinking or
9 contingency fund that may be necessary to facilitate a bond issue, federally
10 guaranteed loan or other appropriate financing instrument.

11 (4) The Secretary shall expend the funds identified in
12 Paragraphs 21(a)(1) and 21(a)(2) for the purpose of implementing this Settlement,
13 together with any other federal funds appropriated for such purpose, and together
14 with any non-federal funds received pursuant to cost-sharing agreements with the
15 State of California and any other cost-sharing agreements entered into by the
16 Secretary for this purpose. If authorized by Congress, the Secretary may carry over
17 any funds received during a federal fiscal year, and not needed in that federal fiscal
18 year for activities provided under this Settlement, to a subsequent federal fiscal
19 year to implement activities provided under this Settlement.

20 (5) The Parties shall cooperate in connection with the
21 preparation and issuance of a revenue bond, federally guaranteed loan, or other
22 appropriate financing instrument.

23 (b) Limitation on Financial Contribution of Certain Contracting
24 Entities. Payments made by long-term contractors who receive water from the
25 Friant Division and Hidden and Buchanan Units of the CVP as provided in
26 Paragraph 21(a) and payments made pursuant to Paragraph 16(b)(3) of this
27 Settlement shall be the limit of such entities' direct financial contribution to this
28 Settlement; *provided, however*, that the Friant Division long-term contractors shall

1 continue to pay no less than their current per acre foot surcharge assessed
2 pursuant to CVPIA § 3406(c)(1) for the duration of the restoration programs
3 provided under this Settlement, and *further provided* that the Friant Division and
4 Hidden and Buchanan Units long-term contractors shall continue to pay no less
5 than their current per acre foot restoration charges pursuant to CVPIA
6 § 3407(d)(2)(a). Notwithstanding the preceding sentence, the Parties understand
7 and agree that the implementation of this Settlement may lead to reduced water
8 deliveries to Friant Division long-term contractors resulting in increased water rates
9 for water delivered to such entities pursuant to their existing water service
10 contracts, and this Settlement shall have no effect on the determination of such
11 water rates. The Parties further agree that this limitation on financial responsibility
12 for the Friant Division and Hidden and Buchanan Units long-term contractors does
13 not extend to recovery of costs for any new water supply benefit beyond those
14 provided pursuant to the water management measures provided in Paragraph 16.

15 (c) Additional Federal Appropriations. The dedication of funds as
16 provided in Paragraph 21(a) shall not preclude the Secretary from attempting to
17 seek to secure the appropriations of additional funds by Congress for the
18 implementation of this Settlement. The Secretary anticipates seeking such
19 appropriations through the appropriate administrative process; *provided however*,
20 that the amount requested in any year shall not be subject to Paragraphs 25
21 through 27 of this Settlement or otherwise subject to judicial enforcement.

22 (d) State Contributions. The Secretary shall negotiate one or more
23 agreements with the State of California, on terms and conditions mutually agreeable
24 to the Secretary and the State, by which the State shall participate in the
25 implementation of this Settlement through funding and other means.

26 **Contract Amendments**

27 22. The Parties agree as follows:
28 (a) Subject to Paragraph 32, the Parties agree that as part of the

1 resolution of Plaintiffs' contract-related claims for relief, all existing long-term water
2 service contracts in the Friant Division and Hidden and Buchanan Units are valid
3 and shall continue to be in effect under the terms and conditions of such contracts,
4 as amended by this Settlement. The Parties further agree that, by entering into this
5 Settlement, Plaintiffs do not waive any right to challenge any contract not identified
6 in this Paragraph 22(a). In the event the Judgment entered pursuant to this
7 Settlement is vacated, the following amendments in Paragraph 22(b) shall be void
8 *ab initio*, and Article 14(b) of the existing contracts shall be automatically
9 reinstated.

10 (b) To implement this Settlement, all existing long-term water
11 service contracts in the Friant Division and the Hidden and Buchanan Units shall
12 be amended for the limited purpose of adding the language provided in Paragraphs
13 22(b)(1) through 22(b)(4). The Secretary shall ensure that all such contract
14 amendments for the Friant Division and the Hidden and Buchanan Units have been
15 executed no later than 90 days after the Effective Date of this Settlement,

16 (1) Article 3(a) shall be amended to provide after the words
17 "consistent with all applicable State water rights, permits, and licenses, Federal
18 law" the phrase ", and the Stipulation of Settlement dated September 13, 2006, the
19 Order Approving Stipulation of Settlement, and the Judgment and further orders
20 issued by the Court pursuant to terms and conditions of the Settlement in *Natural*
21 *Resources Defense Council, et al. v. Rodgers, et al.*, No. CIV-S-88-1658 LKK/GGH."

22 (2) Article 11(a) shall be amended to add after the words
23 "Federal law" the phrase ", and the Stipulation of Settlement dated September 13,
24 2006, the Order Approving Stipulation of Settlement, the Judgment and further
25 orders issued by the Court pursuant to terms and conditions of the Settlement in
26 *Natural Resources Defense Council, et al. v. Rodgers, et al.*, No. CIV-S-88-1658
27 LKK/GGH."

28 (3) Article 12(b) shall be amended to provide after the words

1 “legal obligation” the phrase “, including but not limited to obligations pursuant to
2 the Stipulation of Settlement dated September 13, 2006, the Order Approving
3 Stipulation of Settlement, the Judgment and further orders issued by the Court
4 pursuant to terms and conditions of the Settlement in *Natural Resources Defense*
5 *Council, et al. v. Rodgers, et al.*, No. CIV-S-88-1658 LKK/GGH.”

6 (4) Article 14(b) shall be amended to provide: "The terms of
7 this Contract are subject to the Stipulation of Settlement dated September 13,
8 2006, the Order Approving Stipulation Of Settlement, the Judgment and further
9 orders issued by the Court pursuant to terms and conditions of the Settlement in
10 *Natural Resources Defense Council, et al. v. Rodgers, et al.*, No. CIV-S-88-1658-
11 LKK/GGH. Nothing in this Contract shall be interpreted to limit or interfere with
12 the full implementation of this Settlement, Order, the Judgment and further orders
13 issued by the Court pursuant to terms and conditions of the Settlement.”

14 **Conditions Precedent and Force Majeure**

15 23. Conditions Precedent. The Secretary’s obligations to implement the
16 improvements specified under Paragraph 11 are subject to the condition precedent
17 that the legislation substantially in the form of Exhibit A shall, as provided in
18 Paragraph 8, be enacted into law. To the extent this condition precedent is not
19 satisfied, the Secretary shall be relieved of the affected obligations, and no breach of
20 this Agreement shall result, and no liability shall accrue to the United States. Prior
21 to the enactment of the legislation (Exhibit A), the Secretary may exercise any
22 existing authority to initiate the planning and design of the improvements specified
23 under Paragraph 11, subject to the availability of appropriations. Except as
24 expressly provided in this Paragraph 23, there are no conditions precedent, either
25 express or implied.

26 24. Force Majeure. The Parties agree:

27 (a) A “force majeure event” means an event beyond the reasonable
28 control of the Secretary that prevents the Secretary from fulfilling any obligation

1 required by this Settlement despite the exercise of due diligence. Such events may
2 include natural disasters as well as all unavoidable legal impediments or
3 prohibitions. In the case of a force majeure event, the Secretary shall be relieved of
4 those specific obligations directly precluded by the force majeure event, as well as
5 those other obligations whose performance is precluded by the inability to perform,
6 or delay in performing, the directly precluded obligations, and only for the duration
7 of such force majeure event, as provided herein. The term "due diligence" includes,
8 to the extent reasonably possible, taking steps to prevent or minimize the force
9 majeure event's interference with the Secretary's performance of any affected
10 obligations under this Settlement.

11 (b) In the event of a force majeure event:

12 (1) The Secretary shall notify the other Parties orally, within
13 five days of the onset of the claimed force majeure event, of the occurrence, nature
14 and expected duration of such event to the extent then known by the Secretary.

15 That oral notification shall be followed by written notification to be sent within ten
16 days of the force majeure event providing the aforementioned information as well as
17 a description, to the extent then known by the Secretary, of the steps taken or
18 proposed to be taken to prevent or minimize the force majeure event's interference
19 with the Secretary's performance of any affected obligations under this Settlement;

20 (2) The Secretary shall provide periodic written notification
21 to the other Parties of the Secretary's efforts to address and resolve a force majeure
22 event; and

23 (3) If any Party disputes the Secretary's claim of a force
24 majeure event, or the adequacy of the Secretary's efforts to address and resolve
25 such event, such Party shall proceed in the manner specified in Paragraphs 25, 26,
26 and 27.

27 **Resolution Of Disputes Under This Stipulation Of Settlement**

28 25. This Court shall retain jurisdiction over this Settlement for the

1 purpose of judicial resolution through the procedures provided under Paragraph 27
2 of disputes that may arise among the Parties to this Settlement concerning the
3 interpretation or implementation of this Settlement. This Court's continuing
4 jurisdiction shall continue until the later of (i) July 1, 2026, or (ii) a motion is
5 brought pursuant to Paragraph 20, and the matter is finally resolved as provided in
6 that Paragraph.

7 26. Prior to seeking relief from this Court to resolve a dispute under this
8 Settlement, the Parties shall first meet and confer in good faith to informally resolve
9 such dispute, with the proviso that issues concerning the exercise of condemnation
10 authority are not subject to the provisions of Paragraphs 26 and 27 or otherwise
11 subject to judicial enforcement under this Settlement. In the event that such
12 informal efforts fail, the Parties agree to follow the procedure for a formal resolution
13 of all such disputes as stated below:

14 (a) The complaining Party shall serve on the other Parties a written
15 Statement of Position setting forth that Party's position, and including such data,
16 analysis, or opinion as that Party reasonably believes is necessary to prevail as to
17 the matter in dispute;

18 (b) Within twenty (20) days of receipt of the Statement of Position,
19 any other Party may serve its written Statement of Position with respect to such
20 dispute;

21 (c) The Parties shall thereafter meet and confer in an effort to
22 resolve the dispute. If the dispute remains unresolved, the Parties by mutual
23 consent may, but are not required to, select a third party neutral to assist the
24 Parties in resolving the dispute. In such event, the Parties to the dispute shall
25 share the reasonable costs of the third party neutral on a *pro-rata* basis. Any
26 proceedings before the third party neutral shall be commenced as expeditiously as
27 possible and shall not involve taking discovery. The third party neutral shall not be
28 required to issue any decision or opinion, and any Party to the particular dispute

1 may in good faith elect to terminate such proceedings and proceed to invoke the
2 jurisdiction of this Court as provided in Paragraph 27 of this Settlement; and

3 (d) Except for the purpose of demonstrating compliance or
4 noncompliance with the informal and formal dispute resolution provisions of this
5 Paragraph 26, the informal and formal dispute resolution proceedings provided for
6 in this Paragraph 26 shall be and remain confidential.

7 27. In the event the Parties are unable to resolve a dispute arising under
8 this Settlement by means of the informal or formal procedures provided in
9 Paragraph 26, any Party may thereafter invoke, as provided in this Paragraph 27,
10 the jurisdiction of this Court to resolve such dispute, in accordance with the
11 procedures set forth below, with the proviso that issues concerning the exercise of
12 condemnation authority are not subject to the provisions of Paragraphs 26 and 27
13 or otherwise subject to judicial enforcement under this Settlement.

14 (a) The complaining party shall notice a motion, in accordance
15 with the Local Rules of this Court, requesting judicial resolution of the dispute.
16 The parties may, by stipulation approved by the Court, alter the time table for
17 briefing the motion; otherwise, briefing shall proceed as set forth in the Local Rules.

18 (b) A Party may conduct discovery as to the matter in dispute only
19 after approval by the Court upon a showing of good cause that the discovery is
20 necessary.

21 (c) In resolving the dispute, the Court shall review the Parties'
22 respective positions and supporting data, analyses, and opinions, together with
23 such other information as the Parties may seek to submit. The standard of review
24 to be applied by the Court is whether the position of the Party charged with
25 non-performance was arbitrary or capricious or not in good faith.

26 (d) In exercising the retained jurisdiction to resolve disputes
27 brought before the Court by the Parties as provided under this Paragraph 27, the
28 Court shall award only such relief as is provided in 5 U.S.C. § 706, and only after

1 briefing of the matter in dispute pursuant to the provisions of this Paragraph 27.
2 In no case shall a Party be deemed in contempt or otherwise subject to sanctions
3 for nonperformance until after issuance of an order of Court following briefing of
4 the matter in dispute pursuant to the provisions of this Paragraph 27 and after a
5 reasonable time is provided for compliance with such order.

6 (e) The Party prevailing in a matter disputed pursuant to this
7 Paragraph 27 may seek to recover its reasonable attorneys' fees and costs incurred
8 in bringing a successful claim of nonperformance, provided that such fees and costs
9 may be recovered only to the extent otherwise provided by law.

10 **Additional Provisions**

11 28. In implementing this Settlement, the Secretary shall comply with all
12 applicable federal and state laws, rules and regulations, including the NEPA and
13 the ESA, as necessary. The Secretary shall initiate and expeditiously complete
14 applicable environmental documentation and consultations as may be necessary to
15 effectuate the purposes of this Settlement.

16 29. All agreements with third parties to implement material terms of this
17 Settlement shall be consistent with this Settlement. The Parties shall make all such
18 agreements available to the other Parties within a reasonable time of execution and
19 upon request, subject to exemptions under the Freedom of Information Act and the
20 California Public Records Act, as applicable. The Parties will develop procedures for
21 providing notice to one another of such agreements.

22 30. In the event of any action by third parties to challenge the terms and
23 conditions of this Settlement, Plaintiffs and the Friant Parties agree to cooperate
24 with the Federal Defendants in a vigorous defense of such action as necessary.

25 31. As of the Effective Date of this Settlement, the Secretary has not
26 developed a plan pursuant to CVPIA § 3406(c)(1) that is inconsistent with the terms
27 and conditions of this Settlement.

28 32. This Settlement is executed solely for the purpose of compromising

1 and settling this litigation, and nothing herein shall be construed as a precedent in
2 any other context. This Settlement shall bind the Parties only as may be necessary
3 to implement the terms of this Settlement. Nothing in this Settlement shall be
4 construed or offered in evidence in any proceeding as an admission or concession of
5 wrongdoing, liability, or any issue of fact or law concerning the claims settled under
6 this Settlement.

7 33. Nothing in this Settlement shall be construed to deprive any federal
8 official of the authority to revise, amend, or promulgate regulations. Nothing in this
9 Settlement shall be deemed to limit the authority of the executive branch to make
10 recommendations to Congress on any particular piece of legislation.

11 34. No Member of or Delegate to Congress, Resident Commissioner, or
12 official of the Friant Water Users Authority shall benefit from this Settlement other
13 than as a water user or landowner in the same manner as other water users or
14 landowners.

15 35. Nothing in this Settlement shall be construed to commit a federal
16 official to expend federal funds not appropriated by Congress.

17 36. To the extent that the expenditure or advance of any money or the
18 performance of any obligation of the United States under this Settlement is to be
19 funded by appropriation of funds by Congress, the expenditure, advance, or
20 performance shall be contingent upon the appropriation of funds by Congress that
21 are available for this purpose and the apportionment of such funds by the Office of
22 Management and Budget. No breach of this Settlement shall result and no liability
23 shall accrue to the United States in the event such funds are not appropriated or
24 apportioned.

25 37. The Parties reserve the right to amend this Settlement upon mutually
26 agreeable terms to comply with any subsequent court order issued by a court of
27 competent jurisdiction concerning the operation of the Friant Division of the CVP.

28 38. Except as provided in this Settlement, this Settlement shall be

1 governed by, and construed and enforced in accordance with, and pursuant to, the
2 laws of the United States of America, including federal reclamation law and federal
3 law applicable to contracts made or performed by the United States or to which it is
4 a party.

5 39. The Parties shall each (a) execute all such additional documents as
6 may reasonably be necessary or desirable to carry out the provisions of this
7 Settlement, and (b) in good faith undertake all reasonable efforts to effectuate the
8 provisions of this Settlement.

9 40. This Settlement is binding upon and shall inure to the benefit of each
10 of the Plaintiffs, the Federal Defendants, the Friant Water Users Authority and all
11 Friant Division and Hidden and Buchanan Unit long-term contractors, and their
12 respective agents, employees, representatives, officers, directors, parents,
13 subsidiaries, divisions, affiliates, heirs, executors, estates, administrators,
14 predecessors, successors and assigns. Except as provided in this Paragraph 40,
15 this Settlement is not intended to, and shall not be interpreted in a manner so as to
16 confer rights on persons or entities who are not Parties hereto, or to create intended
17 or expected third party status on any such non-party.

18 41. The Parties each agree that this Settlement is contractual in nature,
19 not a mere recital. This Settlement constitutes the final, complete and exclusive
20 agreement and understanding among the Parties with respect to this Settlement,
21 and supersedes all prior agreements and understandings, whether oral or written,
22 concerning the subject matter hereof. Other than the Exhibits to this Settlement,
23 which are attached hereto and incorporated by reference, no other document, nor
24 any representation, inducement, agreement, understanding or promise, constitutes
25 any part of this Settlement or the settlement it represents, nor shall it be used in
26 construing this Settlement.

27 42. The Parties agree that none of them shall assert that any legal
28 argument, assertion, defense or other legal claim raised by another Party is barred

1 by the passage of time resulting from the implementation of this Settlement, and by
2 execution of this Settlement, the Parties agree to toll any applicable statutes of
3 limitation.

4 43. No releases of Restoration Flows or Interim Flows, nor any failure to
5 deliver (or diminution in delivery of) water pursuant to existing contracts or
6 renewals thereof because of any release of Restoration Flows or Interim Flows, nor
7 any failure to deliver (or diminution in delivery of) water pursuant to Paragraph 16,
8 shall give rise to any claim for a taking of property pursuant to the United States
9 Constitution, Constitution of the State of California, or the Tucker Act, 28 U.S.C. §
10 1491.

11 44. The Parties each acknowledge that (a) it has been represented by
12 counsel throughout all of the negotiations that preceded execution of this
13 Settlement, and (b) it has executed this Settlement in consideration of the advice of
14 such legal counsel.

15 45. (a) This Settlement is a global resolution of all of Plaintiffs' claims
16 against the Federal Defendants and the Friant Parties, except for Plaintiffs' claims
17 for attorneys' fees, expenses, and costs, which are left for future negotiation,
18 resolution, or Court order. Nothing in this Settlement shall be construed or offered
19 in evidence in any proceeding as an admission or concession of wrongdoing or
20 liability, or of any issue of fact or law concerning the claims settled under this
21 Settlement. The Federal Defendants do not hereby waive any defenses they may
22 have concerning Plaintiffs' claims against the Federal Defendants, including
23 Plaintiffs' claims for attorneys' fees, expenses, and costs. The Plaintiffs may offer
24 the Settlement into evidence to support their claim for attorneys' fees, expenses,
25 and costs, and the Federal Defendants may dispute any assertion made by the
26 Plaintiffs. This Settlement is executed solely for the purpose of compromising and
27 settling this litigation, and nothing herein shall be construed as precedent in any
28 other context.

1 (b) The Plaintiffs intend to move for an award of their attorneys’
 2 fees, expenses, and costs incurred subsequent to April 10, 2000, in the prosecution
 3 of this action, including settlement, pursuant to the Endangered Species Act, 16
 4 U.S.C. §1540(g), and under the Equal Access to Justice Act, 28 U.S.C. § 2412. The
 5 Plaintiffs will file their motion for an award of attorneys’ fees, expenses, and costs
 6 within thirty (30) days of entry of the Judgment provided for in this Settlement, in
 7 accordance with the separate Order approving this Stipulation, and the Parties
 8 agree that, following entry of the Judgment, they will negotiate in good faith
 9 concerning the amount of attorneys’ fees, expenses, and costs to be paid to the
 10 Plaintiffs. In the event such negotiations do not resolve Plaintiffs’ motion, (1) the
 11 Friant Parties agree that, in the manner and to the extent provided by above-
 12 referenced statutes, the Plaintiffs are entitled to an award of their reasonable
 13 attorneys’ fees, expenses, and costs for the period subsequent to April 10, 2000,
 14 and (2) the Federal Defendants reserve their right to oppose Plaintiffs’ motion as
 15 provided in Paragraph 45(a), above. Briefing and resolution of Plaintiffs’ motion for
 16 attorneys’ fees, expenses, and costs shall follow the procedure set forth in the
 17 separate Order approving this Stipulation.

18 46. For purposes of this Settlement, each of the Parties shall designate a
 19 point of contact, or change thereto, for all notices and consultations required by this
 20 Settlement. The initial points of contacts so designated are:

21 Plaintiffs:
 22 San Joaquin River Project Manager
 23 Western Water Project
 24 Natural Resources Defense Council
 111 Sutter Street, 20th Floor
 San Francisco, CA 94104

25 Federal Defendants:
 26 Area Manager
 27 South-Central California Area Office
 28 U.S. Bureau of Reclamation
 1243 N Street
 Fresno, CA 93721

1 Fisheries Program Manager
2 California/Nevada Operations Office
3 U.S. Fish and Wildlife Service
4 2800 Cottage Way, W-2605
5 Sacramento, CA 95825

6 Assistant Regional Administrator for Protected Resources
7 National Marine Fisheries Service
8 650 Capitol Mall, Suite 8-300
9 Sacramento, CA 95814

10 Regional Solicitor
11 Pacific Southwest Region
12 U.S. Department of the Interior
13 2800 Cottage Way, E-1712
14 Sacramento, CA 95825

15 Friant Parties:

16 General Manager
17 Friant Water Users Authority
18 854 North Harvard Avenue
19 Lindsay, CA 93247

20 Gregory K. Wilkinson
21 Best, Best & Krieger
22 P.O. Box 1028
23 Riverside, CA 92502-1028

24 47. This Settlement may be executed in counterparts.

25 48. This Settlement may only be modified in writing upon agreement of the
26 Parties.

27 49. The Parties agree to entry of an Order approving this Settlement, in
28 the form of Exhibit E, and a Stipulated Judgment in the form of Exhibit F.

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DATED: 9/13/2006

NATURAL RESOURCES DEFENSE COUNCIL,
SHEPPARD MULLIN RICHTER & HAMPTON LLP
ALTSHULER, BERZON, NUSSBAUM, RUBIN & DEMAIN


By



PHILIP F. ATKINS-PATTENSON
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NATURAL RESOURCES DEFENSE COUNCIL, *et al.*

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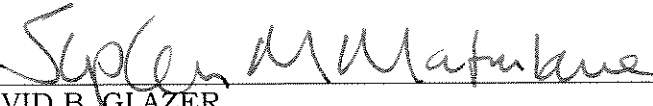


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DATED: 9/13/2006

UNITED STATES DEPARTMENT OF JUSTICE
NATURAL RESOURCES SECTION, ENVIRONMENT &
NATURAL RESOURCES DIVISION

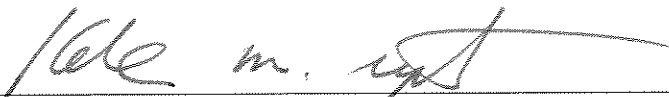
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KIRK RODGERS, *et al.*

DATED: 9/13/2006

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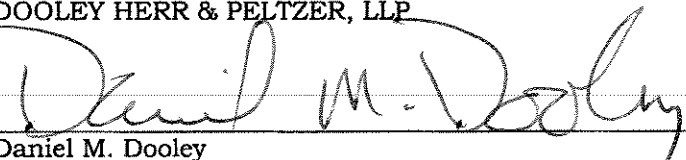


Kole M. Upton
Chair, Friant Water Users Authority

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DATED: 9/13/2006

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DATED: 9/13/2006

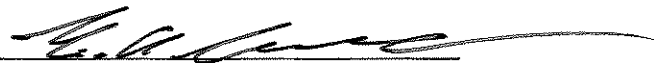
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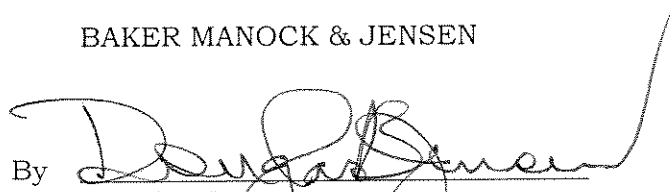
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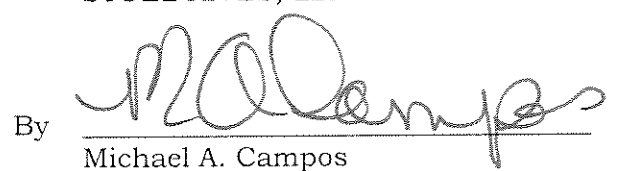
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DATED: 9/13/2006

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STIPULATION OF SETTLEMENT

NRDC v. RODGERS

DRAFT LEGISLATION

EXHIBIT A

Title ___: SAN JOAQUIN RIVER RESTORATION SETTLEMENT ACT

Section 101. Short Title.

This Title may be cited as the "San Joaquin River Restoration Settlement Act."

Section 102. Purposes.

The purpose of this title is to authorize implementation of the Stipulation of Settlement dated [insert date] (the "Settlement") in the litigation entitled NATURAL RESOURCES DEFENSE COUNCIL, et al. v. KIRK RODGERS, et al., United States District Court, Eastern District of California, No. CIV. S-88-1658-LKK/GGH.

Section 103. Definitions.

As used in this Title, the terms "Friant Division long-term contractors," "Interim Flows," "Restoration Flows," "Recovered Water Account," "Restoration Goal," and "Water Management Goal" shall have the meaning as defined in the Settlement referenced in Section 102 of this Title.

Section 104. Implementation of Settlement.

- (a) The Secretary of the Interior ("Secretary") is hereby authorized and directed to implement the terms and conditions of the Settlement in cooperation with the State of California, including but not limited to the following measures as these measures are prescribed in the Settlement:
 - (i) Design and construct channel and structural improvements as described in Paragraph 11 of the Settlement; *provided, however*, that the Secretary shall not make or fund any such improvements to facilities or property of the State of California without the approval of the State of California and the State's agreement in one or more Memoranda of Understanding to participate where appropriate;
 - (ii) Modify Friant Dam operations so as to provide Restoration Flows and Interim Flows;
 - (iii) Acquire water, water rights, or options to acquire water as described in Paragraph 13 of the Settlement;
 - (iv) Implement the terms and conditions of the Settlement related to recirculation, recapture, reuse, exchange or transfer of water

released for Restoration Flows or Interim Flows, for the purpose of accomplishing the Water Management Goal of the Settlement; and

- (v) Develop and implement the Recovered Water Account as specified in the Settlement, including the pricing and payment crediting provisions described in Paragraph 16(b)(3) of the Settlement, provided that all other provisions of Reclamation Law shall remain applicable.
- (b) In order to facilitate or expedite implementation of the Settlement, the Secretary is authorized and directed to enter into appropriate agreements, including cost sharing agreements, with the State of California. The Secretary is further authorized to enter into contracts, memoranda of understanding, financial assistance agreements, cost sharing agreements and other appropriate agreements with state, tribal, and local governmental agencies, and with private parties, including, but not limited to, agreements related to construction, and operation and maintenance of facilities, all of which shall be on terms and conditions that the Secretary deems necessary to achieve the purposes of the Settlement.
- (c) The Secretary is further authorized to accept and expend non-federal funds in order to facilitate implementation of the Settlement.
- (d) The Secretary is further authorized to conduct any design or engineering studies that are necessary to implement the Settlement.

Section 105. Acquisition and Disposal of Property; Title to Facilities

- (a) Unless acquired pursuant to Section 105(b) of this Title, title to any facility or facilities, stream channel, levees, or other real property modified or improved in the course of implementing the Settlement authorized by this Title, and title to any modifications or improvements of such facility or facilities, stream channel, levees, or other real property shall remain in the owner of the property and shall not be transferred to the United States on account of such modifications or improvements.
- (b) The Secretary is authorized to acquire through purchase from willing sellers any property, interests in property, or options to acquire real property needed to implement the Settlement authorized by this Title. The Secretary is authorized, but not required, to exercise all of the authorities provided in Section 2 of the Act of August 26, 1937, Ch. 832, 50 Stat. 844, to carry out the measures authorized in Sections 104 and 105 of this Title.

- (c) Upon the Secretary's determination that retention of title to property or interests in property acquired pursuant to this Title is no longer needed to be held by the United States for the furtherance of the Settlement, the Secretary is authorized to dispose of such property or interest in property on such terms and conditions as the Secretary deems appropriate and in the best interest of the United States, including but not limited to, possible transfer of such property to the State of California. Proceeds from the disposal by sale of any such property or interests in property shall be deposited in the fund established by Section 109(c) of this Title.

Section 106. Compliance with Applicable Law.

- (a) In undertaking the measures authorized by Section 104 of this Title, the Secretary shall comply with all applicable federal and state laws, rules and regulations, including the National Environmental Policy Act and the Endangered Species Act, as necessary. The Secretaries of the Interior and Commerce are authorized and directed to initiate and expeditiously complete applicable environmental reviews and consultations as may be necessary to effectuate the purposes of the Settlement. Nothing in this Title shall modify any existing obligation of the United States under federal reclamation law to operate the Central Valley Project in conformity with State law.
- (b) In undertaking the measures authorized by Section 104 of this Title, and for which environmental review is required, the Secretary may provide funds made available under this Title to affected Federal agencies, State agencies, and Indian tribes if the Secretary determines that such funds are necessary to allow the Federal agencies, State agencies, or Indian tribes to effectively participate in the environmental review process. For purposes of this section, environmental review is defined to include any consultation and planning necessary to comply with paragraph (a) of this section. Such funds may be provided only to support activities that directly contribute to the implementation of the terms and conditions of the Settlement.
- (c) The United States' share of the costs of implementing this Title shall be non-reimbursable under Reclamation law, provided that nothing in this subsection shall limit or be construed to limit the use of the funds assessed and collected pursuant to Sections 3406(c)(1) and 3407(d)(2) of Title XXXIV of Pub. L. No. 102-575, for implementation of the Settlement, nor shall it be construed to limit or modify existing or future Central Valley Project Ratesetting Policies.

Section 107. Compliance with Central Valley Project Improvement Act.

Congress hereby finds and declares that the Settlement satisfies and discharges all of the obligations of the Secretary contained in Section 3406(c) (1) of Title XXXIV of Public Law 102-575; *provided, however*, that the Secretary shall continue to assess and collect the charges provided in Section 3406(c)(1) as provided in the Settlement and Section 109(d) of this Title.

Section 108. No Private Right of Action.

Nothing in this Title shall confer upon any person or entity not a party to the Settlement a private right of action or claim for relief to interpret or enforce the provisions of this Title or the Settlement.

Section 109. Appropriations; Settlement Fund.

- (a) The costs of implementing the provisions of Section 104(a)(i) of this Title shall be shared by the State of California pursuant to the terms of a Memorandum of Understanding executed by the State of California and the Parties to the Settlement on [date]. In addition, the Secretary shall enter into one or more agreements to fund or implement improvements on a project-by-project basis with the State of California, which agreements shall provide for recognition of either monetary or in-kind contributions toward the State of California's share of the cost of implementing the provisions of Section 104(a)(i).
- (b) In addition to the funds provided in Sections (c)(1), (c)(3), and (c)(5) below, there are also authorized to be appropriated not to exceed \$ 250 million (October 2006 price levels) to implement this Title and the Settlement, to be available until expended.. The Secretary is authorized to use monies from the Fund created under Section 3407 of Title XXXIV of Public Law 102-575 for purposes of this Title.
- (c) There is hereby established within the Treasury of the United States the "San Joaquin River Restoration Fund," into which shall be deposited, and which shall be used solely for the purpose of implementing the Settlement:
 - (1) Subject to Section 109(d) below, at the beginning of the fiscal year following enactment of this Title, all payments received pursuant to Section 3406(c)(1) of Title XXXIV of Public Law 102-575, which shall be available for expenditure without further appropriation;
 - (2) Subject to Section 109(d) below, the capital component (not otherwise needed to cover operation and maintenance costs) of

payments made by Friant Division long-term contractors pursuant to long-term water service contracts for 9 years beginning the first fiscal year following enactment of this Title. The capital repayment obligation of such contractors under such contracts shall be reduced by the amount paid pursuant to this Section 109(c)(2).

- (3) Proceeds from a bond issue, federally guaranteed loan or other appropriate financing instrument, to be issued or entered into by an appropriate public agency or subdivision of the State of California, which funds shall be available for expenditure without further appropriation.
 - (4) Proceeds from the sale of water pursuant to the Settlement, or from the sale of property or interests in property as provided in Section 105 of this Title, which funds shall be available for expenditure without further appropriation.
 - (5) Any non-federal funds, including but not limited to State cost-sharing funds, contributed to the United States for implementation of the Settlement, which the Secretary may expend without further appropriation for the purposes for which contributed.
- (d) The Secretary is authorized to enter into agreements with appropriate agencies or subdivisions of the State of California in order to facilitate a bond issue, federally guaranteed loan or other appropriate financing instrument, for the purpose of implementing this Settlement. If the Secretary and an appropriate agency or subdivision enter into such an agreement, and if such agency or subdivision issues one or more revenue bonds, procures a federally secured loan, or other appropriate financing to fund implementation of the Settlement, and if such agency deposits the proceeds received from such bonds, loans or financing into the Fund pursuant to Section 109(c)(3), monies specified in Sections 109(c)(1) and (2) shall be provided by the Friant Division long-term contractors directly to such public agency or subdivision to repay the bond, loan or financing rather than into the Fund. After the satisfaction of any such bond, loan or financing, the payments specified in Sections 109(c)(1) and (2) shall be paid directly into the Fund authorized by this Section 109.
- (e) Payments made by long-term contractors who receive water from the Friant Division and Hidden and Buchanan Units of the Central Valley Project pursuant to §§ 3406(c)(1) and 3407(d)(2)(a) of Title XXXIV of Pub. L. No. 102-575 and payments made pursuant to Paragraph 16(b)(3) of the Settlement and Section 109(c)(2) of this Title shall be the limitation of such entities' direct financial contribution to the Settlement, subject to the terms and conditions of Paragraph 21 of the Settlement.

- (f) Nothing in this Act shall be construed to require a federal official to expend federal funds not appropriated by Congress, or to seek the appropriation of additional funds by Congress, for the implementation of the Settlement.
-

STIPULATION OF SETTLEMENT NRDC v. RODGERS

EXHIBIT B

[Restoration Hydrographs]

This Exhibit B sets forth the hydrographs which constitute the “Base Flows” referenced in paragraph 13 of the Stipulation of Settlement. For purposes of implementing the hydrographs, the following provisions shall apply:

1. Buffer Flows.

Paragraph 13 of the Stipulation of Settlement provides for the Base Flows to be augmented by Buffer Flows of up to 10% of the applicable hydrograph included in this Exhibit B. Except as provided in Paragraph 4 of this Exhibit B, such Buffer Flows are intended to augment the daily flows specified in the applicable hydrograph. For purposes of this Exhibit, Base Flows and Buffer Flows shall collectively be referred to as Restoration Flows.

2. Water Year Types.

The Base Flows are presented in Tables 1A-1F as a set of six hydrographs that vary in shape and volume according to wetness in the basin. The six year types are described as “Critical Low”, “Critical High”, “Dry”, “Normal-Dry”, “Normal-Wet”, and “Wet.” The total annual unimpaired runoff at Friant for the water year (October through September) is the index by which the water year type is determined. In order of descending wetness, the wettest 20 percent of the years are classified as Wet, the next 30 percent of the years are classified as Normal-Wet, the next 30 percent of the years are classified as Normal-Dry, the next 15 percent of the years are classified as Dry, and the remaining 5 percent of the years are classified as Critical (represented by the “Critical High” hydrograph). A subset of the Critical years, those with less than 400 TAF of unimpaired runoff, are identified for use of the “Critical Low” hydrograph. The hydrographs, Tables 1A-1F, depict an annual quantity of water based upon the flow schedules identified. Components of the hydrograph are plotted for each water-year type, with various types of flows (Fall Base and Spring Run Incubation Flow; Fall Run attraction Flow; Fall-Run Spawning and Incubation Flow; Winter Base Flows; Spring Rise and Pulse Flows; Summer Base Flows; Spring-Run Spawning Flows) in specified amounts throughout the year, some of which vary in amount and duration depending upon year type classification. To avoid a moving distribution of year-type assignment, water years 1922-2004 will be used to establish year types.

3. Continuous Line Hydrographs.

The Parties agree to transform the stair step hydrographs to more continuous hydrographs prior to December 31, 2008 to ensure completion before the initiation of Restoration Flows, provided that the Parties shall mutually-agree that transforming the hydrographs will not materially impact the Restoration or Water Management Goal.

4. Flexibility in Timing of Releases.

(a) In order to achieve the Restoration Goal and to avoid material adverse impacts on existing fisheries downstream of Friant Dam, the Parties agree to the following provisions to provide certain flexibility in administration of the hydrographs and Buffer Flows.

(b) The distribution of Base Flow releases depicted in each hydrograph is intended to allow flexibility in any given year for the Restoration Administrator, in consultation with the

Technical Advisory Committee, to recommend to the Secretary appropriate ramping rates and precise flow amounts on specific dates as provided for in this subparagraph and consistent with the flow measurement and monitoring provisions of the Settlement. Base Flow releases allocated during the period from March 1 through May 1 (the "Spring Period") in any year may be shifted up to four weeks earlier and later than what is depicted in the hydrograph for that year, and managed flexibly within that range (i.e. February 1 through May 28), so long as the total volume of Base Flows allocated for the Spring Period is not changed. The Base Flows depicted in each hydrograph from October 1 through November 30 (the "Fall Period") likewise are intended to allow flexibility in any given year for the Restoration Administrator, in consultation with the Technical Advisory Committee, to recommend to the Secretary precise flow amounts on specific dates, and may be shifted up to four weeks earlier or later so long as the total volume of Base Flows allocated during that Period of the year is not changed.

(c) The process for determining and implementing Buffer Flows is set out in Paragraphs 13 and 18 of the Settlement, as implemented by this Exhibit B. The Restoration Administrator, in consultation with the Technical Advisory Committee, may recommend to the Secretary that the daily releases provided for in the hydrographs, or as modified pursuant to Paragraph 4(b) above, be augmented by application of the Buffer Flows up to 10% of the daily flows. From October 1 through December 31, the Buffer Flows shall be defined as 10% of the total volume of Base Flows during that period, and may be managed flexibly as a block of water during the Fall Period and four weeks earlier or later, as provided in Paragraph 4(b) above. Up to 50% of the Buffer Flows available from May 1 to September 30 not to exceed 5,000 acre feet may be moved to augment flows during the Spring or the Fall Periods.

(d) The Restoration Administrator may recommend additional changes in specific release schedules within an applicable hydrograph (beyond those described in subparagraphs (b) and (c) above) to the extent consistent with achieving the Restoration Goal without changing the total amount of water otherwise required to be released pursuant to the applicable hydrograph or materially increasing the water delivery reductions to any Friant Division long-term contractors.

5. Flushing Flows.

In Normal-Wet and Wet years, the stair-step hydrographs, Exhibits 1A-1F, include a block of water averaging 4,000 cfs from April 16-30 to perform several functions, including but not limited to geomorphic functions such as flushing spawning gravels ("The Flushing Flows"). Therefore, unless the Secretary, in consultation with the Restoration Administrator, determines that Flushing Flows are not needed, hydrographs in Normal-Wet and Wet years will also include Flushing Flows during that period. Working within the constraints of the flood control system, the Restoration Flow releases from Friant Dam to provide these Flushing Flows shall include a peak release as close to 8,000 cfs as possible for several hours and then recede at an appropriate rate. The precise timing and magnitude of the Flushing Flows shall be based on monitoring of meteorological conditions, channel conveyance capacity, salmonid distribution, and other physical/ecological factors with the primary goal to mobilize spawning gravels, maintain their looseness and flush fine sediments, so long as the total volume of Restoration Flows allocated for Flushing Flows for that year is not changed. Nothing in this Paragraph 5 is intended to limit the flexibility to move or modify the Flushing Flows as provided in Paragraph 4 above, so long as the total volume of Base Flows allocated during the Spring Period is not changed.

6. Riparian Recruitment Flows.

In Wet Years, in coordination with the peak Flushing Flow releases, Restoration Flows should be gradually ramped down over a 60-90 day period to promote the establishment of riparian vegetation at appropriate elevations in the channel. The precise timing and magnitude of the riparian recruitment release shall be based on monitoring of meteorological conditions, channel conveyance capacity, salmonid distribution and other physical/ecological factors with the primary goal to establish native riparian vegetation working within the constraints of the flood control system, so long as the total volume of Restoration Flows allocated for Riparian Recruitment for that year is not exceeded.

Table 1B. Proposed restoration flow release schedule and accounting for critical high year type on the San Joaquin River

Hydrograph Component	Friant Release	Gain and Loss Assumptions			Flow at Upstream End of Reach				
		Riparian Releases	Reach 2 losses	Salt and Mud Slough Accretions	Reach 2	Reach 3	Reach 4	Reach 5	Confluence
Fall Base and Spring Run Incubation Flow	160	160	80	300	5	0	0	0	300
Fall Run Attraction Flow	400	130	100	300	275	175	175	175	475
Fall-Run Spawning and Incubation Flow	120	120	80	400	5	0	0	0	400
Winter Base Flows	110	100	80	500	15	0	0	0	500
Spring Rise and Pulse Flows	500	130	90	500	375	285	285	285	785
	1500	130	150	475	1375	1225	1225	1225	1700
	200	150	80	400	55	0	0	0	400
	200	150	80	400	55	0	0	0	400
Summer Base Flows	215	190	80	400	30	0	0	0	400
	255	230	80	275	30	0	0	0	275
	260	210	80	275	55	0	0	0	275
Spring-Run Spawning Flows									
Total Annual (acre ft.)	187,457	116,662	60,568	276,012	74,408	49,352	49,352	49,352	325,364
Assumed Riparian Release	116,662								
Restoration Release (af)	70,795								

- Riparian releases - Riparian releases for current conditions average from 117- to 126 TAF/YR. Assumed approx 117 TAF/YR to be consistent with Steiner declaration which is derived from CALSIM and WSS estimates; adjusted monthly estimates to add to approx 117 TAF and to be more consistent with data from last 5 years; rounded to nearest 10 cfs. The Nov/Dec period 120 cfs estimate is an average of the assumed 130 cfs average in Nov and 110 cfs in Dec; the May/June period average of 190 cfs is an average of 175 cfs in May and 200 cfs in June. Friant base releases in recent years (2001 - 2005) have actually average of approximately 124,000 acre feet in order to meet 5 cfs. at every diversion point during all seasons.
- Reach 2 losses - Determined by flow at head of Reach 2. Assume relatively constant, steady-state conditions. Flows at head of reach less than 300 lose 80 cfs consistent with 1995-200 data including 1999 pilot project. Flows between 300 and 400 cfs lose 90 cfs; flows above 400 and below 800 cfs lose 100 cfs; consistent with 1995-2000 data. Above 1000 cfs used flow lose curve on fig 2-4 of the Background Report. That curve was based upon non- steady-state flow conditions and thus likely overestimate steady-state conditions. Assume no losses in Reach 2B below the Bifurcation.
- Salt and Mud Slough Accretions - From Sum of Mud and Salt Slough flow in Table 2-15 of the Background Report. Additional accretions occur in reach 4B and 5 but small (up to 50 cfs) relative to total Mud and Salt Slough inflow.
- Reach 2 flow- Flow at head of Reach 2 is equal to Friant release minus riparian release plus Gravelly Ford base flow of 5 cfs. The Gravelly Ford base flow is usually higher in winter because of local tributary inflow, return flow and requirement to meet 5 cfs flow at every diversion point. Summer base flow is often higher than 5 cfs because of irrigation return flow and requirement to meet 5 cfs flow at every diversion point.
- Reach 3 flow - Equal to Reach 2 flow minus Reach 2 losses. Reach 3 flow ignores contributions from Delta Mendota Canal added at Mendota Pool which is subsequently diverted at the bottom of Reach 3 at Sack Dam into the Arroyo Canal and therefore assumes no net gain. Actual inflows could be greater particularly during the irrigation season.
- Reach 4 flows - Equal to the net Reach 3 flows. Additional flow in Reach 3 is on "top" of existing irrigation supply flows and no losses are assumed although Reach 3 appears to be a small losing reach at this time. May become gaining reach over time if losses in Reach 2 fill sufficient aquifer storage.
- Reach 5 flow - Assume equal to Reach 4 flow. Seasonal losses in Reach 4A and gains in Reach 4B. Although likely a net gain in Reach 4 flow, assumed no gain for simplicity.
- Confluence - Reach 5 flow plus Mud and Salt Slough. Does not include up to another 50 cfs of accretion upstream of Mud and Salt Slough that the WOST hydrograph included.
- Flows in the May 1 to June 30, July 1 to Aug 30 and Sept 1 to Sept 31st have elevated flows of 25 to 50 cfs reflecting 3TAF blocks of water to be used for riparian vegetation irrigation
- Riparian release total slightly different in critical years due to variations in the length of the November pulse flow and rounding of riparian release averages during the November 1- December 31 time period.

Table 1C. Proposed restoration flow release schedule and accounting for dry year type on the San Joaquin River

Hydrograph Component	Friant Release	Gain and Loss Assumptions			Flow at Upstream End of Reach				
		Riparian Releases	Reach 2 losses	Salt and Mud Slough Accretions	Reach 2	Reach 3	Reach 4	Reach 5	Confluence
Fall Base and Spring Run Incubation Flow	350	160	80	300	195	115	115	115	415
Fall Run Attraction Flow	700	130	100	300	575	475	475	475	775
Fall-Run Spawning and Incubation Flow	350	120	80	400	235	155	155	155	555
Winter Base Flows	350	100	80	500	255	175	175	175	675
	500	130	90	500	375	285	285	285	785
Spring Rise and Pulse Flows	1,500	130	150	475	1,375	1,225	1,225	1,225	1,700
	350	150	80	400	205	125	125	125	525
	350	150	80	400	205	125	125	125	525
Summer Base Flows	350	190	80	400	165	85	85	85	485
	350	230	80	275	125	45	45	45	320
Spring-Run Spawning Flows	350	210	80	275	145	65	65	65	340
Total Annual (acre ft.)	300,762	116,741	60,727	275,220	187,635	126,908	126,908	126,908	402,128
Assumed Riparian Release	116,741								
Restoration Release (af)	184,021								

- Riparian releases - Riparian releases for current conditions average from 117- to 126 TAF/YR. Assumed approx 117 TAF/YR to be consistent with Steiner declaration which is derived from CALSIM and WSS estimates; adjusted monthly estimates to add to approx 117 TAF and to be more consistent with data from last 5 years; rounded to nearest 10 cfs. The Nov/Dec period 120 cfs estimate is an average of the assumed 130 cfs average in Nov and 110 cfs in Dec; the May/June period average of 190 cfs is an average of 175 cfs in May and 200 cfs in June. Friant base releases in recent years (2001 - 2005) have actually average of approximately 124,000 acre feet in order to meet 5 cfs. at every diversion point during all seasons.
- Reach 2 losses - Determined by flow at head of Reach 2. Assume relatively constant, steady-state conditions. Flows at head of reach less than 300 lose 80 cfs consistent with 1995-200 data including 1999 pilot project. Flows between 300 and 400 cfs lose 90 cfs; flows above 400 and below 800 cfs lose 100 cfs; consistent with 1995-2000 data. Above 1000 cfs used flow lose curve on fig 2-4 of the Background Report. That curve was based upon non- steady-state flow conditions and thus likely overestimate steady-state conditions. Assume no losses in Reach 2B below the Bifurcation.
- Salt and Mud Slough Accretions - From Sum of Mud and Salt Slough flow in Table 2-15 of the Background Report. Additional accretions occur in reach 4B and 5 but small (up to 50 cfs) relative to total Mud and Salt Slough inflow.
- Reach 2 flow- Flow at head of Reach 2 is equal to Friant release minus riparian release plus Gravelly Ford base flow of 5 cfs. The Gravelly Ford base flow is usually higher in winter because of local tributary inflow, return flow and requirement to meet 5 cfs flow at every diversion point. Summer base flow is often higher than 5 cfs because of irrigation return flow and requirement to meet 5 cfs flow at every diversion point.
- Reach 3 flow - Equal to Reach 2 flow minus Reach 2 losses. Reach 3 flow ignores contributions from Delta Mendota Canal added at Mendota Pool which is subsequently diverted at the bottom of Reach 3 at Sack Dam into the Arroyo Canal and therefore assumes no net gain. Actual inflows could be greater particularly during the irrigation season.
- Reach 4 flows - Equal to the net Reach 3 flows. Additional flow in Reach 3 is on "top" of existing irrigation supply flows and no losses are assumed although Reach 3 appears to be a small losing reach at this time. May become gaining reach over time if losses in Reach 2 fill sufficient aquifer storage.
- Reach 5 flow - Assume equal to Reach 4 flow. Seasonal losses in Reach 4A and gains in Reach 4B. Although likely a net gain in Reach 4 flow, assumed no gain for simplicity.
- Confluence - Reach 5 flow plus Mud and Salt Slough. Does not include up to another 50 cfs of accretion upstream of Mud and Salt Slough that the WOST hydrograph included.

Table 1D. Proposed restoration flow release schedule and accounting for normal-dry year type on the San Joaquin River

Hydrograph Component	Friant Release	Gain and Loss Assumptions				Flow at Upstream End of Reach				
		Riparian Releases	Reach 2 losses	Mud Slough Accretions	Salt and Mud Slough Accretions	Reach 2	Reach 3	Reach 4	Reach 5	Confluence
Fall Base and Spring Run Incubation Flow	350	160	80	300	195	115	115	115	115	415
Fall Run Attraction Flow	700	130	100	300	575	475	475	475	475	775
Fall-Run Spawning and Incubation Flow	350	120	80	400	235	155	155	155	155	555
Winter Base Flows	350	100	80	500	255	175	175	175	175	675
	500	130	90	500	375	285	285	285	285	785
Spring Rise and Pulse Flows	1,500	130	150	475	1,375	1,225	1,225	1,225	1,225	1,700
	2,500	150	175	400	2,355	2,180	2,180	2,180	2,180	2,580
	350	150	80	400	205	125	125	125	125	525
Summer Base Flows	350	190	80	400	165	85	85	85	85	485
	350	230	80	275	125	45	45	45	45	320
Spring-Run Spawning Flows	350	210	80	275	145	65	65	65	65	340
Total Annual (acre ft.)	364,617	116,741	63,548	275,220	251,490	187,942	187,942	187,942	187,942	483,162
Assumed Riparian Release	116,741									
Restoration Release (af)	247,876									

- Riparian releases - Riparian releases for current conditions average from 117- to 126 TAF/YR. Assumed approx 117 TAF/YR to be consistent with Steiner declaration which is derived from CALSIM and WSS estimates; adjusted monthly estimates to add to approx 117 TAF and to be more consistent with data from last 5 years; rounded to nearest 10 cfs. The Nov/Dec period 120 cfs estimate is an average of the assumed 130 cfs average in Nov and 110 cfs in Dec; the May/June period average of 190 cfs is an average of 175 cfs in May and 200 cfs in June. Friant base releases in recent years (2001 - 2005) have actually average of approximately 124,000 acre feet in order to meet 5 cfs. at every diversion point during all seasons.
- Reach 2 losses - Determined by flow at head of Reach 2. Assume relatively constant, steady-state conditions. Flows at head of reach less than 300 lose 80 cfs consistent with 1995-200 data including 1999 pilot project. Flows between 300 and 400 cfs lose 90 cfs; flows above 400 and below 800 cfs lose 100 cfs; consistent with 1995-2000 data. Above 1000 cfs used flow lose curve on fig 2-4 of the Background Report. That curve was based upon non-steady-state flow conditions and thus likely overestimate steady-state conditions. Assume no losses in Reach 2B below the Bifurcation.
- Salt and Mud Slough Accretions - From Sum of Mud and Salt Slough flow in Table 2-15 of the Background Report. Additional accretions occur in reach 4B and 5 but small (up to 50 cfs) relative to total Mud and Salt Slough inflow.
- Reach 2 flow- Flow at head of Reach 2 is equal to Friant release minus riparian release plus Gravelly Ford base flow of 5 cfs. The Gravelly Ford base flow is usually higher in winter because of local tributary inflow, return flow and requirement to meet 5 cfs flow at every diversion point. Summer base flow is often higher than 5 cfs because of irrigation return flow and requirement to meet 5 cfs flow at every diversion point.
- Reach 3 flow - Equal to Reach 2 flow minus Reach 2 losses. Reach 3 flow ignores contributions from Delta Mendota Canal added at Mendota Pool which is subsequently diverted at the bottom of Reach 3 at Sack Dam into the Arroyo Canal and therefore assumes no net gain. Actual inflows could be greater particularly during the irrigation season.
- Reach 4 flows - Equal to the net Reach 3 flows. Additional flow in Reach 3 is on "top" of existing irrigation supply flows and no losses are assumed although Reach 3 appears to be a small losing reach at this time. May become gaining reach over time if losses in Reach 2 fill sufficient aquifer storage.
- Reach 5 flow - Assume equal to Reach 4 flow. Seasonal losses in Reach 4A and gains in Reach 4B. Although likely a net gain in Reach 4 flow, assumed no gain for simplicity.
- Confluence - Reach 5 flow plus Mud and Salt Slough. Does not include up to another 50 cfs of accretion upstream of Mud and Salt Slough that the WOST hydrograph included.

Table 1E. Proposed restoration flow release schedule and accounting for normal-wet year type on the San Joaquin River

Hydrograph Component	Gain and Loss Assumptions				Flow at Upstream End of Reach					
	Friant Release	Riparian Releases	Reach 2 losses	Salt and Mud Slough Accretions	Reach 1	Reach 2	Reach 3	Reach 4	Reach 5	Confluence
Fall Base and Spring Run Incubation Flow	350	160	80	300	115	195	115	115	115	415
Fall Run Attraction Flow	700	130	100	300	475	575	475	475	475	775
Fall-Run Spawning and Incubation Flow	350	120	80	400	155	235	155	155	155	555
Winter Base Flows	350	100	80	500	175	255	175	175	175	675
	500	130	90	500	285	375	285	285	285	785
Spring Rise and Pulse Flows	1,500	130	150	475	1,225	1,375	1,225	1,225	1,225	1,700
	2,500	150	175	400	2,180	2,355	2,180	2,180	2,180	2,580
	4,000	150	200	400	3,655	3,855	3,655	3,655	3,655	4,055
Summer Base Flows	350	190	80	400	85	165	85	85	85	485
	350	230	80	275	45	125	45	45	45	320
Spring-Run Spawning Flows	350	210	80	275	65	145	65	65	65	340
Total Annual (acre ft.)	473,022	116,741	67,112	275,220	292,783	359,895	292,783	292,783	292,783	568,003
Assumed Riparian Release	116,741									
Restoration Release (af)	356,281									

- Riparian releases - Riparian releases for current conditions average from 117- to 126 TAF/YR. Assumed approx 117 TAF/YR to be consistent with Steiner declaration which is derived from CALSIM and WSS estimates; adjusted monthly estimates to add to approx 117 TAF and to be more consistent with data from last 5 years; rounded to nearest 10 cfs. The Nov/Dec period 120 cfs estimate is an average of the assumed 130 cfs average in Nov and 110 cfs in Dec; the May/June period average of 190 cfs is an average of 175 cfs in May and 200 cfs in June. Friant base releases in recent years (2001 - 2005) have actually average of approximately 124,000 acre feet in order to meet 5 cfs, at every diversion point during all seasons.
- Reach 2 losses - Determined by flow at head of Reach 2. Assume relatively constant, steady-state conditions. Flows at head of reach less than 300 lose 80 cfs consistent with 1995-200 data including 1999 pilot project. Flows between 300 and 400 cfs lose 90 cfs; flows above 400 and below 800 cfs lose 100 cfs; consistent with 1995-2000 data. Above 1000 cfs used flow lose curve on fig 2-4 of the Background Report. That curve was based upon non- steady-state flow conditions and thus likely overestimate steady-state conditions. Assume no losses in Reach 2B below the Bifurcation.
- Salt and Mud Slough Accretions - From Sum of Mud and Salt Slough flow in Table 2-15 of the Background Report. Additional accretions occur in reach 4B and 5 but small (up to 50 cfs) relative to total Mud and Salt Slough inflow.
- Reach 2 flow - Flow at head of Reach 2 is equal to Friant release minus riparian release plus Gravelly Ford base flow of 5 cfs. The Gravelly Ford base flow is usually higher in winter because of local tributary inflow, return flow and requirement to meet 5 cfs flow at every diversion point. Summer base flow is often higher than 5 cfs because of irrigation return flow and requirement to meet 5 cfs flow at every diversion point.
- Reach 3 flow - Equal to Reach 2 flow minus Reach 2 losses. Reach 3 flow ignores contributions from Delta Mendota Canal added at Mendota Pool which is subsequently diverted at the bottom of Reach 3 at Sack Dam into the Arroyo Canal and therefore assumes no net gain. Actual inflows could be greater particularly during the irrigation season.
- Reach 4 flows - Equal to the net Reach 3 flows. Additional flow in Reach 3 is on "top" of existing irrigation supply flows and no losses are assumed although Reach 3 appears to be a small losing reach at this time. May become gaining reach over time if losses in Reach 2 fill sufficient aquifer storage.
- Reach 5 flow - Assume equal to Reach 4 flow. Seasonal losses in Reach 4A and gains in Reach 4B. Although likely a net gain in Reach 4 flow, assumed no gain for simplicity.
- Confluence - Reach 5 flow plus Mud and Salt Slough. Does not include up to another 50 cfs of accretion upstream of Mud and Salt Slough that the WOST hydrograph included.

Table 1F. Proposed restoration flow release schedule and accounting for wet year type on the San Joaquin River

Hydrograph Component	Friant Release	Gain and Loss Assumptions			Flow at Upstream End of Reach				
		Riparian Releases	Reach 2 losses	Salt and Mud Slough Accretions	Reach 2	Reach 3	Reach 4	Reach 5	Confluence
Fall Base and Spring Run Incubation Flow	350	160	80	300	195	115	115	115	415
Fall Run Attraction Flow	700	130	100	300	575	475	475	475	775
Fall-Run Spawning and Incubation Flow	350	120	80	400	235	155	155	155	555
Winter Base Flows	350	100	80	500	255	175	175	175	675
	500	130	90	500	375	285	285	285	785
Spring Rise and Pulse Flows	1,500	130	150	475	1,375	1,225	1,225	1,225	1,700
	2,500	150	175	400	2,355	2,180	2,180	2,180	2,580
	4,000	150	200	400	3,855	3,655	3,655	3,655	4,055
Summer Base Flows	2,000	190	165	400	1,815	1,650	1,650	1,650	2,050
	350	230	80	275	125	45	45	45	320
Spring-Run Spawning Flows	350	210	80	275	145	65	65	65	340
Total Annual (acre ft.)	672,309	116,741	77,378	275,220	559,182	481,803	481,803	481,803	757,023
Assumed Riparian Release	116,741								
Restoration Release (af)	555,568								

- Riparian releases - Riparian releases for current conditions average from 117- to 126 TAF/YR. Assumed approx 117 TAF/YR to be consistent with Steiner declaration which is derived from CALSIM and WSS estimates; adjusted monthly estimates to add to approx 117 TAF and to be more consistent with data from last 5 years; rounded to nearest 10 cfs. The Nov/Dec period 120 cfs estimate is an average of the assumed 130 cfs average in Nov and 110 cfs in Dec; the May/June period average of 190 cfs is an average of 175 cfs in May and 200 cfs in June. Friant base releases in recent years (2001 - 2005) have actually average of approximately 124,000 acre feet in order to meet 5 cfs. at every diversion point during all seasons.
- Reach 2 losses - Determined by flow at head of Reach 2. Assume relatively constant, steady-state conditions. Flows at head of reach less than 300 lose 80 cfs consistent with 1995-200 data including 1999 pilot project. Flows between 300 and 400 cfs lose 90 cfs; flows above 400 and below 800 cfs lose 100 cfs; consistent with 1995-2000 data. Above 1000 cfs used flow lose curve on fig 2-4 of the Background Report. That curve was based upon non- steady-state flow conditions and thus likely overestimate steady-state conditions. Assume no losses in Reach 2B below the Bifurcation.
- Salt and Mud Slough Accretions - From Sum of Mud and Salt Slough flow in Table 2-15 of the Background Report. Additional accretions occur in reach 4B and 5 but small (up to 50 cfs) relative to total Mud and Salt Slough inflow.
- Reach 2 flow- Flow at head of Reach 2 is equal to Friant release minus riparian release plus Gravelly Ford base flow of 5 cfs. The Gravelly Ford base flow is usually higher in winter because of local tributary inflow, return flow and requirement to meet 5 cfs flow at every diversion point. Summer base flow is often higher than 5 cfs because of irrigation return flow and requirement to meet 5 cfs flow at every diversion point.
- Reach 3 flow - Equal to Reach 2 flow minus Reach 2 losses. Reach 3 flow ignores contributions from Delta Mendota Canal added at Mendota Pool which is subsequently diverted at the bottom of Reach 3 at Sack Dam into the Arroyo Canal and therefore assumes no net gain. Actual inflows could be greater particularly during the irrigation season.
- Reach 4 flows - Equal to the net Reach 3 flows. Additional flow in Reach 3 is on "top" of existing irrigation supply flows and no losses are assumed although Reach 3 appears to be a small losing reach at this time. May become gaining reach over time if losses in Reach 2 fill sufficient aquifer storage.
- Reach 5 flow - Assume equal to Reach 4 flow. Seasonal losses in Reach 4A and gains in Reach 4B. Although likely a net gain in Reach 4 flow, assumed no gain for simplicity.
- Confluence - Reach 5 flow plus Mud and Salt Slough. Does not include up to another 50 cfs of accretion upstream of Mud and Salt Slough that the WOST hydrograph included.
- May - June flow of 2,000 c.f.s. is block of water for shaping as riparian recruitment recession flow.

STIPULATION OF SETTLEMENT

NRDC v. RODGERS

PARAGRAPH 11 MILESTONE DATES

EXHIBIT C

EXHIBIT C

The Parties have collectively developed the following timeline for the development and implementation of the improvements described in Paragraph 11 of the Stipulation of Settlement. In so doing, the Parties have considered a variety of factors including, but not limited to, the desire to commence Restoration Flows (and other restoration-related activities) at the earliest possible date, as well as the challenges associated with the development and implementation of these improvements. For these reasons, the dates set forth below represent milestones for purposes of implementing the Settlement. The enforceable deadlines are set forth in the Stipulation of Settlement.

These dates were drawn from a schedule the Federal Defendants developed to assess the estimated minimum period to complete the Paragraph 11 improvements. The Parties recognize that this schedule is ambitious and reflects the Parties' intent to complete the improvements in an expeditious manner. Many assumptions were made in developing this schedule and include, but are not limited to: technical understanding of the nature of the improvements given the current limited availability of detailed site-specific information, availability of sufficient funding and resources, timely acquisition of necessary land and entry rights, timely availability of detailed information and survey results for environmental analysis, timely issuance of necessary permits, and no reduction in the estimated annual 120-day construction period due to weather, in-stream flows events, environmental or permitting requirements.

Program Environmental Compliance

September, 2009: Complete necessary and appropriate NEPA, NHPA, ESA, CEQA review

Phase 1 Improvements

December, 2011: Complete modification of Reach 4B to route at least 475 cfs

December, 2012: Complete Reach 2B-Mendota Pool 4,500 cfs bypass channel

Complete modifications of Sand Slough Control Structure and San Joaquin River headgate for routing 500-4,500 cfs and fish passage

Complete screening of Arroyo Canal and construction of fish ladder at Sack Dam

Complete modification of structures in the East Side and Mariposa Bypasses for fish passage

Complete construction of low-flow channel in East Side and Mariposa Bypasses, if necessary

Complete steps to enable deployment of fish barriers at Salt and Mud Sloughs

December, 2013: Complete Reach 2B channel capacity increase to 4,500 cfs with floodplain and riparian habitat

Phase 2 Improvements

December, 2016: Complete modification of Reach 4B for routing 4,500 cfs

Complete filling and isolating gravel pits in Reach 1

Complete modifications to Bifurcation Structure for fish passage and to prevent entrainment, if necessary

STIPULATION OF SETTLEMENT

NRDC v. RODGERS

EXHIBIT D

[Technical Advisory Committee and Restoration Administrator]

This Exhibit D describes the duties and tasks identified for the Restoration Administrator and the Technical Advisory Committee in the Stipulation of Settlement (the "Settlement").

A. Selection And Term Of Restoration Administrator

1. Within 60 days of the effective date of this Settlement, the Plaintiffs and Friant Defendants will decide upon a mutually agreed upon selection for Restoration Administrator. The Restoration Administrator shall have technical qualifications related to the Restoration Goal and, at the time of appointment, shall have no relationship to any of the Parties. In the event the Plaintiffs and Friant Defendants do not agree upon a Restoration Administrator selection within 60 days of the effective date of this Settlement, the Plaintiffs will appoint two individuals and the Friant Defendants will appoint two individuals to a selection committee, which will then select a fifth individual member who is not currently employed by any Party and has relevant technical background. This committee will confer no later than 90 days after the effective date of this Settlement and select by majority vote an individual to serve as the Restoration Administrator and submit such selection to the Court for appointment.

2. If the individual serving as Restoration Administrator resigns, is discharged by the non-federal Parties or is unable to perform the duties of the Restoration Administrator, then the process described in Paragraph 1 will be used to select a replacement within 60 days of the date the Restoration Administrator resigns, or is discharged or is unable to perform the duties of the Restoration Administrator. The selection shall be submitted to the Court for appointment. Any Party may petition the Plaintiffs and the Friant Defendants to replace the individual serving as Restoration Administrator for non-performance of duties. If the Parties do not agree about whether the Restoration Administrator should be discharged, the non-federal Parties shall form a selection committee as described in Paragraph 1 to make findings and recommend the retention or discharge of the Restoration Administrator. A majority vote recommendation of the committee will be binding on the Parties.

3. The appointment of the Restoration Administrator pursuant to Paragraph 1 above shall be for an initial term of 6 years. The Restoration Administrator may be reappointed, or a new Restoration Administrator may be appointed, by the Plaintiffs and Friant Defendants pursuant to the procedure set forth in Paragraph 1 above, each for a term of 6 years. The Restoration Administrator shall continue to advise the Secretary of the Interior ("Secretary") as specified in this Settlement and this Exhibit D until December 31, 2026, unless extended by mutual agreement of the Parties.

B. Composition and Selection of the Technical Advisory Committee

4. The Friant Defendants and Plaintiffs agree to establish a Technical Advisory Committee ("TAC") to assist the Restoration Administrator as set forth in this Settlement and Exhibit D.

5. The membership of the TAC shall not be federal employees. Accordingly, the TAC will consist of two Plaintiffs' designees and two Friant Defendants' designees. The TAC will also include two designees mutually agreed upon by the Plaintiffs and Friant Defendants. In order to provide the greatest assistance to the Restoration

Administrator regarding the implementation of the Settlement, it is agreed that all TAC members should have relevant technical or scientific background or expertise in fields related to river restoration or fishery restoration.

6. Within 60 days of the effective date of this Settlement, the Plaintiffs and the Friant Defendants shall (1) provide to all Parties the names and contact information for their two initial designees for the TAC; and (2) confer on a list of potential nominees for the two mutually-agreed upon designees for the TAC. If Plaintiffs and Friant Defendants cannot mutually agree on the two additional members of the TAC, then each of the two parties will submit three names along with supporting qualifications to the Restoration Administrator to select the two most qualified candidates for the positions.

7. All members of the TAC will be appointed for 3 year terms, which shall be renewable pursuant to the procedure set forth in Paragraph 5 and 6. Vacancies shall be filled pursuant to Paragraph 5 above. The TAC will continue until 2026, unless terminated sooner or extended further by mutual agreement of the Plaintiffs and Friant Defendants. The Secretary will not fund or manage the activities of the TAC. The work of the TAC will be coordinated by the Restoration Administrator, and the Restoration Administrator shall be authorized to create a separate account in a financial institution mutually agreeable to the Plaintiffs and Friant Defendants ("Restoration Administrator Account"), and accept funding into that account from the State or other non-federal sources, to support the work of the TAC. The Restoration Administrator, with the assistance of the Plaintiffs and Friant Defendants, shall ensure that the work of the TAC is funded at appropriate levels through this separate account, including appropriate compensation for the members of the TAC.

C. Duties of the Restoration Administrator and Technical Advisory Committee

8. The Restoration Administrator's general duties are set forth in Paragraphs 9, 11, 12, 13, 14, 15, 16, 17, 18 and 19 of the Stipulation of Settlement, and within this Exhibit D. In carrying out these duties, the Restoration Administrator shall consult with the TAC, and, as provided in Paragraphs 9 and 10 below, consult with such Federal agency technical and regulatory staff as have been designated in accordance with Paragraph 19 of the Stipulation of Settlement.

9. The TAC's primary role will be to advise the Restoration Administrator. The Parties intend that the TAC and the Restoration Administrator will work closely together. In addition to the specific obligations referenced in Paragraph 10 below, the Restoration Administrator and TAC shall, as appropriate, consult with technical representatives of those State agencies with whom the Secretary of Interior and Secretary of Commerce (the Secretaries) have entered into cooperative agreements or memoranda of understanding, and those Federal agency representatives designated in accordance with Paragraph 18 of the Settlement, on matters including, but not be limited to, pre-permitting and pre-ESA consultation activities, sharing of information, and technical assistance during initial project development, planning, design, and implementation phases, and monitoring.

10. In addition to the general duties set forth in the Settlement, the Restoration Administrator shall:

- a. schedule and attend meetings of the TAC, coordinate or facilitate the completion and/or production of any reports of the TAC, receive and consider any recommendations of the TAC, and ensure that meetings of the TAC are open to Federal and State staff designated to assist in the implementation of this Settlement.
 - b. in consultation with the TAC, make recommendations to the Secretaries regarding stock selection, re-introduction strategies, and other significant decisions relating to reintroduction and management of restored Chinook salmon below Friant Dam.
 - c. on or before February 1st of each year, provide an annual written report to the Parties about progress made over the previous calendar year in implementing the Settlement, and the Plaintiffs and Friant Defendants shall furnish a copy of this report to the Court. The report shall include but not be limited to a summary of settlement implementation activities of the previous year, findings of research and data collection, any additional recommended measures to achieve the Restoration Goal, a summary of progress and impediments in meeting targets established pursuant to Paragraph 11 below, and a summary of expenditures from the Restoration Administrator Account. The TAC shall assist in the preparation of this report. The report shall be made available to the Parties, and 30 days thereafter shall be publicly released.
 - d. if in the implementation of any of the tasks set out in the Settlement or in this Exhibit D, the Restoration Administrator reasonably determines there is a need for technical assistance beyond the primary assistance provided by the TAC, the Restoration Administrator, in consultation with the TAC, shall obtain such technical assistance.
11. In order to achieve the Restoration Goal, the Restoration Administrator, in consultation with the TAC, shall as soon as possible, but not later than one year after the effective date of the Settlement, make recommendations to the Secretary regarding the following:
- a. stock selection, re-introduction strategies, and other significant decisions relating to reintroducing and managing spring run and fall run Chinook salmon below Friant Dam;
 - b. appropriate use of existing and enhanced hatchery facilities and trap and haul for the sole purpose of accelerating the reintroduction of self-sustaining Chinook salmon fisheries below Friant Dam. Beyond the use of hatcheries and trap and haul to facilitate reintroduction, the Restoration Administrator shall only recommend the use of hatcheries and trap and haul for operations essential to protect fish populations from dropping below a level of low risk of extirpation;
 - c. appropriate interim targets, goals and milestones for annual escapement of wild adult Chinook salmon, including interim targets designed to achieve continual population growth and the long-term population target

for spring and fall run Chinook salmon by 2025. Interim goals shall include objective criteria to prevent restored populations of wild salmon from dropping below a level of low risk for extirpation;

- d. appropriate long-term targets for annual escapement of wild adult Chinook salmon, which shall reflect the potential of the restored River to support robust populations of wild Chinook salmon; and
 - e. coordination of releases from Friant Dam with fishery restoration actions on the Merced, Tuolumne, and Stanislaus Rivers.
-

EXHIBIT E

**PROPOSED ORDER APPROVING
STIPULATION OF SETTLEMENT**

NRDC v. RODGERS

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2 JARED W. HUFFMAN (SBN 148669)
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17 Attorneys for Plaintiff NRDC

17 UNITED STATES DISTRICT COURT
18 FOR THE EASTERN DISTRICT OF CALIFORNIA

19 NATURAL RESOURCES DEFENSE COUNCIL, *et al.*,

20 Plaintiffs,

21 v.

22 KIRK RODGERS, as Regional Director of the
23 UNITED STATES BUREAU OF RECLAMATION,
24 *et al.*

25 Defendants,

26 ORANGE COVE IRRIGATION DISTRICT, *et al.*,

27 Defendants-Intervenors.
28

Case No.
CIV-S-88-1658 LKK/GGH

**[PROPOSED]
ORDER APPROVING
STIPULATION OF SETTLEMENT**

1 Plaintiffs NRDC, *et al.* (“Plaintiffs”), defendants Kirk. Rodgers, *et al.* (the “Federal
2 Defendants”), and defendants-intervenors Orange Cove Irrigation District, *et al.* (the “Friant
3 Defendants”) have jointly requested approval by this Court of a proposed settlement of this litigation
4 on the terms and conditions set forth in the Stipulation of Settlement (including Exhibits A – F thereto,
5 which are incorporated by reference as part of the Stipulation of Settlement). The Court, which has
6 presided over this complex case for the past 18 years and is intimately familiar with the issues and the
7 parties’ positions with respect thereto, has carefully reviewed the Stipulation of Settlement, and the
8 arguments of counsel for the parties.

9 Accordingly,

10 IT IS HEREBY ORDERED, ADJUDGED AND DECREED that the Stipulation of
11 Settlement, attached hereto as Exhibit 1 and incorporated herein by reference, be and hereby is
12 approved.

13 IT IS FURTHER ORDERED, ADJUDGED AND DECREED that all obligations set
14 forth in the Stipulation of Settlement shall be performed in accordance with the terms of the
15 Stipulation of Settlement.

16 IT IS FURTHER ORDERED, ADJUDGED AND DECREED that this Court shall
17 retain jurisdiction, as provided in the Stipulation of Settlement, for purposes of resolving disputes that
18 may arise in connection with the interpretation of the Stipulation of Settlement or the implementation
19 of the settlement. This Court’s continuing jurisdiction shall continue until the later of (i) July 1, 2026,
20 or (ii) a motion is brought pursuant to Paragraph 20 of the Stipulation of Settlement, and the matter is
21 finally resolved as provided therein. In the event that a party exercises its right under Paragraph 8 of
22 the Stipulation of Settlement prior to that date to declare the settlement provided therein void, the
23 Judgment shall be vacated, and the Court will convene a Status Conference.

24 IT IS FURTHER ORDERED, ADJUDGED AND DECREED that the Plaintiffs and
25 the Friant Defendants are directed to meet and confer concerning the selection of the Restoration
26 Administrator, as provided in the Stipulation of Settlement and Exhibit D thereto, and to submit a
27 Proposed Order Appointing Restoration Administrator to the Court for approval as provided in the
28 Stipulation of Settlement and Exhibit D thereto.

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IT IS FURTHER ORDERED, ADJUDGED AND DECREED that the parties shall attempt to negotiate an award of Plaintiffs' reasonable attorneys' fees and costs as provided in Paragraph 45 of the Stipulation of Settlement. To facilitate such negotiations, and notwithstanding the time limit of Local Rule 54-292(b), Plaintiffs may file a Notice of Motion and Motion for Attorneys' Fees and Costs within 30 days of the entry of the Judgment in this action in order to meet the timeliness requirements of 28 U.S.C. § 2412(d)(1)(B) and Local Rule 54-293; provided, however, within 60 days thereafter, if agreement has not been reached among the parties as to Plaintiffs' Motion for Fees and Costs, then Plaintiffs shall file a brief and supporting materials addressing the remaining requirements for a motion for attorneys' fees and costs as provided in Local Rules 54-293 and 54-292. The Federal Defendants and Friant Defendants may have 30 days following service of Plaintiffs' brief and supporting materials to file papers in opposition, in whole or in part, to Plaintiffs' Motion for Fees and Costs. Plaintiffs may file reply papers within 14 days of service of any opposition papers. Any amount of Plaintiffs' attorneys' fees and costs not resolved by negotiations among the parties shall be determined by the Court through a separate Order on Plaintiffs' Motion.

DATED: _____

THE HONORABLE LAWRENCE K. KARLTON
SENIOR UNITED STATES DISTRICT JUDGE

EXHIBIT F
PROPOSED JUDGMENT

NRDC v. RODGERS

1 HAMILTON CANDEE (SBN 111376)
JARED W. HUFFMAN (SBN 148669)
2 KATHERINE S. POOLE (SBN 195010)
MICHAEL E. WALL (SBN 170238)
3 NATURAL RESOURCES DEFENSE COUNCIL
111 Sutter Street, 20th Floor
4 San Francisco, CA 94104
Tel: (415) 875-6100; Fax: (415) 875-6161
5 Attorneys for Plaintiffs NRDC *et al.*

6 PHILIP F. ATKINS-PATTENSON (SBN 94901)
7 SHEPPARD MULLIN RICHTER & HAMPTON, LLP
4 Embarcadero Center, Suite 1700
8 San Francisco, CA 94111
Tel: (415) 434-9100; Fax: (415) 434-3947
9 Attorneys for Plaintiffs NRDC *et al.*

10 FRED H. ALTSHULER (SBN 43878)
11 SCOTT L. SHUCHART, *pro hac vice* (NY 4345617)
ALTSHULER, BERZON, NUSSBAUM, RUBIN & DEMAINE
12 177 Post Street, Suite 300
San Francisco, CA 94108
13 Tel: (415) 421-7151; Fax: (415) 362-8064
14 Attorneys for Plaintiff NRDC

15 **UNITED STATES DISTRICT COURT**
16 **EASTERN DISTRICT OF CALIFORNIA**
17 **SACRAMENTO DIVISION**

18 NATURAL RESOURCES DEFENSE
COUNCIL, INC., *et al.*

19 Plaintiffs

CV-S-88-1658 LKK/GGH

20 vs.

21
22 KIRK RODGERS, Regional Director,
UNITED STATES BUREAU OF
23 RECLAMATION, *et al.*,

24 Defendants.

[PROPOSED] JUDGMENT

25
26
27 ORANGE COVE IRRIGATION
DISTRICT, *et al.*,

28 Defendants-Interventors

1 In accordance with the Parties' Stipulation of Settlement and the Court's
2 Order of this date approving the Stipulation of Settlement, it is hereby ORDERED
3 that judgment is entered in this case.

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Dated: _____

HON. LAWRENCE K. KARLTON
Senior United States District Judge

PROOF OF SERVICE

I, Mary Ann Vitry, declare:

I am a resident of the State of California and over the age of eighteen years, and not a party to the within action; my business address is Best Best & Krieger LLP, 400 Capitol Mall, Suite 1650, Sacramento, California 95814. On September 13, 2006, I served the within document(s):

NOTICE OF LODGMENT OF STIPULATION OF SETTLEMENT

- by transmitting via facsimile the document(s) listed above to the fax number(s) set forth below on this date before 5:00 p.m.
- by placing the document(s) listed above in a sealed envelope with postage thereon fully prepaid, in the United States mail at Sacramento, California addressed as set forth below.
- by causing personal delivery by _____ of the document(s) listed above to the person(s) at the address(es) set forth below.
- by personally delivering the document(s) listed above to the person(s) at the address(es) set forth below.
- I caused such envelope to be delivered via overnight delivery addressed as indicated on the attached service list. Such envelope was deposited for delivery by _____ following the firm's ordinary business practices.

Via U.S. District Court, notice will be electronically mailed to:

Fred H. Altshuler	faltshuler@altshulerberzon.com , tmason@altshulerberzon.com , sshuchart@altshulerberzon.com , hmillier@altshulerberzon.com
Philip F. Atkins-Pattenson	patkinspattenson@sheppardmullin.com
J. Mark Atlas	jma@jmatlaslaw.com , matlas@mhalaw.com
Hamilton Candee	hcandee@nrdc.org , macaux@nrdc.org
Ernest Albert Conant	econant@youngwooldridge.com , waterlaw@youngwooldridge.com
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Denslow Brooks Green	dengreen@sbcglobal.net
Douglas Blaine Jensen	djb@bmjlaw.com
Jan Leslie Kahn	jkahn@kschanford.com , agarcia@kschanford.com
Jeffrey A. Meith	jmeith@minasianlaw.com , j.meith@att.net , judy@minasianlaw.com , cmecf@minasianlaw.com
Mark William Poole	mark.poole@doj.ca.gov
Jon David Rubin	jrubin@diepenbrock.com , llawrie@diepenbrock.com , jonishi@diepenbrock.com
Michael Victor Sexton	msexton@minasianlaw.com , cmecf@minasianlaw.com , anna@minasianlaw.com

LAW OFFICES OF
BEST BEST & KRIEGER LLP
400 CAPITOL MALL, SUITE 1650
SACRAMENTO, CALIFORNIA 95814

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9	Leo Patrick O'Brien	leo@baykeeper.org
10	Katherine Scott Poole	kpoole@nrdc.org
11	Mark William Poole	mark.poole@doj.ca.gov
12	Richard Roos-Collins	rrcollins@n-h-i-org
13	Daniel Joseph O'Hanlon	Dohanlon@kmtg.com , DGentry@kmtg.com , Calendar8@kmtg.com
14	Gary William Sawyers	gsawyers@sawyerslaw.com
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17	William C. Paris	Bparis@olaughlinparis.com

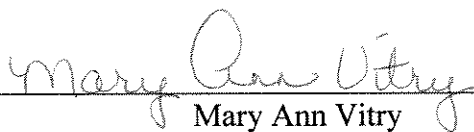
Notice will be delivered via first-class U.S. mail to:

Dante John Nomellini, Jr.
 Nomellini Grilli & McDaniel
 P.O. Box 1461
 Stockton, CA 95201-1461

I am readily familiar with the firm's practice of collection and processing correspondence for mailing. Under that practice it would be deposited with the U.S. Postal Service on that same day with postage thereon fully prepaid in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

I declare that I am employed in the office of a member of the bar of this court at whose direction the service was made.

Executed on September 13, 2006



 Mary Ann Vitry

ATTACHMENT B

MEMORANDUM OF UNDERSTANDING WITH STATE

1 HAMILTON CANDEE (SBN 111376)
JARED W. HUFFMAN (SBN 148669)
2 KATHERINE S. POOLE (SBN 195010)
MICHAEL E. WALL (SBN 170238)
3 NATURAL RESOURCES DEFENSE COUNCIL
4 111 Sutter Street, 20th Floor
San Francisco, CA 94104
5 Tel: (415) 875-6100
6 Fax: (415) 875-6161

7 PHILIP F. ATKINS-PATTENSON, (SBN 94901)
SHEPPARD, MULLIN, RICHTER & HAMPTON LLP
8 Four Embarcadero Center, 17th Floor
San Francisco, California 94111-4109
9 Tel. (415) 434-9100
Fax (415) 434-3947

10 Attorneys for Plaintiffs NRDC, *et al.*

11 [Names Of Additional Counsel Appear On Signature Page]

12 UNITED STATES DISTRICT COURT
13 EASTERN DISTRICT OF CALIFORNIA
14 (SACRAMENTO DIVISION)

15 NATURAL RESOURCES DEFENSE
16 COUNCIL, *et al.*,

17 Plaintiff,

18 v.

19 KIRK RODGERS, as Regional Director of the
20 UNITED STATES BUREAU OF
RECLAMATION, *et al.*,

21 Defendants.

22 ORANGE COVE IRRIGATION DISTRICT,
23 *et al.*,

24 Defendants-Intervenors

Case No. CIV S-88-1658 LKK/GGH

**NOTICE OF FILING OF
MEMORANDUM OF UNDERSTANDING
BETWEEN SETTLING PARTIES AND
STATE OF CALIFORNIA**

1 NOTICE IS HEREBY GIVEN that on September 13, 2006, Plaintiffs Natural
2 Resources Defense Council, *et al.* ("Plaintiffs"), Defendants Kirk Rodgers, *et al.* (the "Federal
3 Defendants") and Defendant Intervenors Orange Cove Irrigation District, *et al.* (the "Friant
4 Defendants") (collectively, the "Settling Parties") are filing with the Court their Memorandum of
5 Understanding with the State of California regarding the implementation of the Stipulation of
6 Settlement lodged earlier today.

7
8 Dated: September 13, 2006

9 NATURAL RESOURCES DEFENSE COUNCIL
10 SHEPPARD, MULLIN, RICHTER & HAMPTON LLP
11 ALTSHULER, BERZON, NUSSBAUM, RUBIN & DEMAIN

12 By 
13 PHILIP F. ATKINS-PATTENSON

14 Attorneys for Plaintiffs
15 Natural Resources Defense Council, *et al.*

16
17 Dated: September 13, 2006

18 UNITED STATES DEPARTMENT OF JUSTICE,
19 ENVIRONMENT AND NATURAL RESOURCES DIVISION,
20 NATURAL RESOURCE SECTION WILDLIFE AND
21 MARINE RESOURCE SECTION

22 By 
23 STEPHEN M. MACFARLANE

24 Attorneys for Defendants
25 Kirk Rodgers, *et al.*

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1 Dated: September 13, 2006

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BEST BEST & KRIEGER LLP

By 
JENNIFER T. BUCKMAN

Attorneys for Defendants Intervenors
Orange Cove Irrigation District, *et al.*

Memorandum of Understanding

by and among
the United States Department of the Interior,
the United States Department of Commerce,
the Natural Resources Defense Council,
the Friant Water Users Authority,
the California Resources Agency,
the California Department of Fish and Game,
the California Department of Water Resources,
and the California Environmental Protection Agency
Regarding Implementation of the Settlement in
Natural Resources
Defense Council, et al. v. Kirk Rodgers, et al.

A. Preface.

This Memorandum of Understanding (the “MOU”) is entered into by and between the United States Department of the Interior and the United States Department of Commerce, on behalf of the Federal Defendants in Natural Resources Defense Council, et al. v. Kirk Rodgers, et al., Civ. No. S-88-1658 LKK/GGH (E.D. Cal.) (hereinafter “NRDC v. Rodgers”), the Natural Resources Defense Council (“NRDC”) on behalf of the Plaintiffs in NRDC v. Rodgers, the Friant Water Users Authority (“FWUA”) on behalf of the Friant Defendant-Interveners in NRDC v. Rodgers (collectively, the “Settling Parties”), and the California Resources Agency, the California Department of Water Resources (“DWR”), California Department of Fish and Game (“DFG”), and the California Environmental Protection Agency (“CalEPA”) (collectively, the “State Agencies”). The parties signatory to this MOU are collectively referred to as the “Parties.”

The Settling Parties are parties to NRDC v. Rodgers. NRDC v. Rodgers concerns, among other things, the restoration and maintenance of flows and fisheries in the main stem of the San Joaquin River between Friant Dam and the confluence of the Merced River. Concurrently herewith, the Settling Parties are executing a Stipulation of Settlement in the above titled action (the “Settlement”). A goal of the Settlement 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 (the “Restoration Goal”). The Settlement also includes a goal to reduce and avoid adverse water supply impacts to all of the Friant Division long-term contractors caused by the Restoration Flows and Interim Flows provided for in the Settlement (the “Water Management Goal”). The Settling Parties believe that the State of California (“State”), through DFG, DWR, the Resources Agency, and the CalEPA should play a major, collaborative role in the planning, design, funding, and implementation of the actions on the San Joaquin River called for by the Settlement.

The State has expressed strong support for this Settlement and has pledged cooperation and the financial resources of the State to help it succeed. The State has a significant interest in restoration of the San Joaquin River, including the exercise of regulatory oversight, jurisdiction over the public trust, land use, ecosystem, species and habitat restoration, water quality, and water management and flood control operations, as well as an interest in maintaining the agricultural economy of California. The State believes that restoration of the San Joaquin River will provide broad benefits to the environment, to the federal, State and local governments, and to millions of Californians. The Settling Parties welcome these expressions by the State, and believe that the participation of the State is essential to the success of the restoration plan for the San Joaquin River.

B. The Effect Of This MOU.

Nothing in this MOU is intended to, nor shall it have the effect of, constraining, limiting or relieving any public entity in carrying out its statutory responsibilities or obligations. Nothing in this MOU constitutes an admission by any of the Parties hereto as to the proper interpretation of any provision of law, nor is anything in this MOU intended to, nor shall it have the effect of, waiving or limiting any of the Parties' rights and remedies under any applicable law. By entering into this MOU, the State Agencies are not stating that the Settlement represents the only feasible manner in which flows or salmon populations could be restored on the main stem of the San Joaquin River. This MOU does not limit the restoration activities that DWR, DFG and other State agencies may undertake on the main stem of the San Joaquin River. Nothing in this MOU is intended to, nor shall it have the effect of, amending, modifying or otherwise altering any provision of the Settlement.

C. Specific Provisions.

1. General Principles.

- a. The State Agencies intend to assist the Settling Parties in implementation of the Settlement consistent with the State Agencies' authorities, resources and broader regional resource strategies.
- b. The Settling Parties intend to assist the State Agencies in their efforts to support the implementation of the Settlement, consistent with the terms and conditions of the Settlement.
- c. The State Agencies and the Settling Parties intend to work together collaboratively in the planning, design, funding and implementation of appropriate aspects of the Settlement.

2. Settlement Implementation by State and Federal Agencies.

The Secretaries of the Interior and Commerce, and the California Secretary for Resources, and the Secretary of CalEPA shall, within 90 days of the effective date of this MOU, establish a process for the State and Federal agencies to implement the Settlement. The Secretary of the Interior and the California Secretary for Resources, in cooperation

with the other Settling Parties, shall establish or convene new or existing working groups, technical committees, or advisory councils, as appropriate, to assure public participation and input into the implementation of the Settlement.

3. Participation In Technical Committees.

- a. The Technical Advisory Committee, as defined in the Settlement, shall include one representative from DWR and one representative from DFG, each of whom shall participate as an ex officio non-voting member who will receive notices of meetings and materials to be considered at such meetings.
- b. Any additional technical committees and/or working groups that may be established to assist in implementation of the Settlement shall, as appropriate, include representatives from DWR, DFG, and other State Agencies and federal agencies.

4. Assistance Of The State Agencies.

- a. DWR intends to assist in various aspects of the planning, design, and construction of physical improvements identified in the Settlement, including projects related to flood protection, levee relocation, construction standards and maintenance, and modifications to, and maintenance of, channel facilities including assistance with obtaining all necessary permits, the design and construction of facilities to provide for fish passage and to minimize fish entrainment, the establishment of appropriate riparian habitat, and identification and implementation of the best available science and monitoring so the system can be adaptively managed to better achieve the goals and document results. DWR also intends to assist in various aspects of the implementation of the Water Management Goal identified in the Settlement. DWR intends to identify specific projects and the nature and level of the assistance for such projects in future agreements.
- b. DFG intends to assist in various aspects of the planning and design of activities, including providing technical assistance to the Settling Parties on actions related to the release of flows identified in the Settlement, the design and construction of facilities to provide for fish passage and to prevent fish entrainment as identified in the Settlement, the manner of reintroducing to, and monitoring and evaluating fish in, the main stem of the San Joaquin River, and the establishment and maintenance of appropriate riparian habitat. DFG intends to identify specific activities and the nature and level of the assistance for such projects in future agreements.
- c. DWR and DFG each intend to assist the Settling Parties in identifying State funding sources which may be available to implement the Restoration Goal and the Water Management Goal of the Settlement, in addition to the funding source described in 4(d) below. Such assistance may include identification of specific present and future funding sources and advice regarding the processes to apply for such funding. Any such funding provided by DWR and/or DFG for implementation of projects identified in the Settlement shall be provided pursuant to separate agreements. In determining

whether to enter into any such separate agreements or to provide funds to implement a project called for in the Settlement, the State intends to consider, among other things: (i) the appropriate share of funding to be provided by Settling Parties consistent with the Settlement; (ii) the overall progress in implementing the Settlement; (iii) the support provided by the Settling Parties for the State Agencies' efforts to implement provisions of the Settlement, as appropriate; and (iv) the success of the Settlement in achieving goals of the Settlement. In addition to these four factors, DFG intends to consider progress in the development of a plan for the founding and restoration stocks for anadromous fish preparatory to the submission of a permit application as provided in paragraph 14 of the Settlement, and the then-current need and level of funding required for the operation of the Hills Ferry Fish Barrier.

- d. An initiative known as "The Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006" ("Bond Act") has qualified for the California ballot for the November 2006 election. The Bond Act specifies in Chapter 5, section 75050 (n), that \$100,000,000 shall be available to the California Resources Secretary for the purpose of implementing a court settlement to restore flows and naturally-reproducing and self-sustaining populations of salmon to the San Joaquin River, and specifies that the funds shall be available for channel and structural improvements and related research pursuant to the court settlement. Should this Bond Act be enacted by the vote of the people of the State of California, the California Resources Secretary shall implement Chapter 5, section 75050 (n) so that such funds are expended consistent with this MOU to implement the Settlement.

D. Additional Provisions.

1. This MOU shall take effect on the effective date of the Settlement and shall terminate on December 31, 2026, unless extended by written agreement of all of the Parties.
2. Any provision of this MOU may be modified or amended, including modification to add parties, only by written agreement executed by all of the Parties.
3. Any Party to this MOU wishing to withdraw from this MOU must provide a written notice to each other Party hereto specifying the reason the notifying Party wishes to withdraw. The Parties shall promptly meet and confer in a good faith effort to address and resolve, if possible, the issue(s) causing the notifying Party to wish to withdraw from this MOU. If following such meeting the notifying Party still wishes to withdraw, such Party can withdraw 30 days after the date of the written notice.
4. The expenditure or advance of any money or the performance of any obligation of the United States under this MOU shall be contingent upon appropriation or allotment of funds. No liability shall accrue to the United States for failure to perform any obligation under this MOU in the event that funds are not appropriated or allotted.
5. The commitments and obligations under this MOU of the State, by and through DWR

and DFG, or other State Agencies, are subject to the availability of appropriated funds. No liability shall accrue to the State for failure to perform any obligation under this MOU in the event that funds are not appropriated or available.

- 6. Nothing in this MOU shall modify any existing obligation of the United States under federal reclamation law to operate the Central Valley Project in conformity with State law.
- 7. This MOU may be signed in two or more counterparts each of which, when executed and delivered, shall be an original and all of which together shall constitute one instrument, with the same force and effect as though all signatures appeared on a single document.
- 8. Notwithstanding any other provision of this MOU, nothing herein is intended to constitute consent by the State or any of its departments, agencies, commissions, and boards to suit in any court described in Article III of the United States Constitution. This MOU shall not waive, or be interpreted as waiving, the State's sovereign immunity under the Eleventh Amendment or any other provision of the United States Constitution in any present or future judicial or administrative forum.
- 9. The Department of the Interior is entering into this MOU pursuant to the Central Valley Project Improvement Act (the "CVPIA"), P.L. 102-575, Title XXXIV, and additional legislation contemplated as part of the Settlement. The Department of Commerce is entering into this MOU pursuant to the Anadromous Fish Conservation Act, 16 U.S.C. § 757a, *et seq.*
- 10. Each signatory to this MOU certifies that he or she is authorized to execute this MOU and to legally bind the Party he or she represents, and that such Party shall be fully bound by the terms hereof upon such signature without further act, approval, or authorization of such Party.

Signatures:

Kirk C. Rodgers, Regional Director, Mid-Pacific Region
Bureau of Reclamation

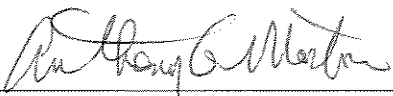
9/12/2006

Date

Steve Thompson, California and Nevada Operations Manager
United States Fish and Wildlife Service

9/12/2006

Date

for 
Rodney McInnis, Regional Administrator
National Marine Fisheries Service

9/12/06

Date

Hamilton Candee
Natural Resources Defense Council on behalf of itself and
all other plaintiffs

Date

Philip F. Atkins-Pattenson
On behalf of NRDC, et al.

Date

Ronald D. Jacobsma, General Manager
Friant Water Users Authority

Date

Michael Chrisman, Secretary
California Resources Agency

Date

Lester A. Snow, Director
California Department of Water Resources

Date


L. Ryan Broddrick, Director
California Department of Fish and Game

Date

Linda S. Adams, Secretary
California Environmental Protection Agency

Date


Rodney McInnis, Regional Administrator
National Marine Fisheries Service
Date 9/13/2006



Hamilton Candee
Natural Resources Defense Council on behalf of itself and
all other plaintiffs
Date 9/13/06



Philip F. Atkins-Pattenson
On behalf of NRDC, et al.
Date 9/13/06



Ronald D. Jacobsma, General Manager
Friant Water Users Authority
Date 9/13/2006

Michael Chrisman, Secretary
California Resources Agency
Date 9/13/2006

Lester A. Snow, Director
California Department of Water Resources
Date 9/13/2006

L. Ryan Broddrick, Director
California Department of Fish and Game
Date 9/13/2006

Linda S. Adams, Secretary
California Environmental Protection Agency
Date 9/13/2006

Rodney McInnis, Regional Administrator
National Marine Fisheries Service Date

Hamilton Candee
Natural Resources Defense Council on behalf of itself and
all other plaintiffs Date

Philip F. Atkins-Pattenson
On behalf of NRDC, et al. Date

Ronald D. Jacobsma, General Manager
Friant Water Users Authority Date

Mike Chrisman 9/13/06

Michael Chrisman, Secretary
California Resources Agency Date

Lester A. Snow, Director
California Department of Water Resources Date

L. Ryan Broddrick, Director
California Department of Fish and Game Date

Linda S. Adams, Secretary
California Environmental Protection Agency Date

Rodney McInnis, Regional Administrator
National Marine Fisheries Service

Date

Hamilton Candee
Natural Resources Defense Council on behalf of itself and
all other plaintiffs

Date

Philip F. Atkins-Pattenson
On behalf of NRDC, et al.


Date

Ronald D. Jacobsma, General Manager
Friant Water Users Authority


Date

Michael Chrisman, Secretary
California Resources Agency

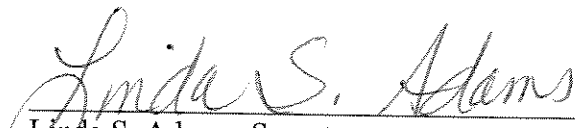
Date


Lester A. Snow, Director
California Department of Water Resources

9/12/06
Date


L. Ryan Broddrick, Director
California Department of Fish and Game

12/28/06
Date


Linda S. Adams, Secretary
California Environmental Protection Agency

9/12/06
Date

PROOF OF SERVICE

I, Mary Ann Vitry, declare:

I am a resident of the State of California and over the age of eighteen years, and not a party to the within action; my business address is Best Best & Krieger LLP, 400 Capitol Mall, Suite 1650, Sacramento, California 95814. On September 13, 2006, I served the within document(s):

NOTICE OF FILING OF MEMORANDUM OF UNDERSTANDING BETWEEN SETTling PARTIES AND STATE OF CALIFORNIA

- by transmitting via facsimile the document(s) listed above to the fax number(s) set forth below on this date before 5:00 p.m.
- by placing the document(s) listed above in a sealed envelope with postage thereon fully prepaid, in the United States mail at Sacramento, California addressed as set forth below.
- by causing personal delivery by _____ of the document(s) listed above to the person(s) at the address(es) set forth below.
- by personally delivering the document(s) listed above to the person(s) at the address(es) set forth below.
- I caused such envelope to be delivered via overnight delivery addressed as indicated on the attached service list. Such envelope was deposited for delivery by _____ following the firm's ordinary business practices.

Via U.S. District Court, notice will be electronically mailed to:

Fred H. Altshuler	faltshuler@altshulerberzon.com , tmason@altshulerberzon.com , sshuchart@altshulerberzon.com , hmillier@altshulerberzon.com
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J. Mark Atlas	jma@jmatlaslaw.com , matlas@mhalaw.com
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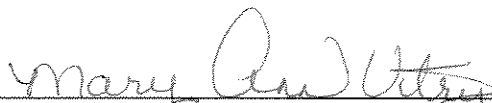
Notice will be delivered via first-class U.S. mail to:

Dante John Nomellini, Jr.
Nomellini Grilli & McDaniel
P.O. Box 1461
Stockton, CA 95201-1461

I am readily familiar with the firm's practice of collection and processing correspondence for mailing. Under that practice it would be deposited with the U.S. Postal Service on that same day with postage thereon fully prepaid in the ordinary course of business. I am aware that on motion of the party served, service is presumed invalid if postal cancellation date or postage meter date is more than one day after date of deposit for mailing in affidavit.

I declare that I am employed in the office of a member of the bar of this court at whose direction the service was made.

Executed on September 13, 2006



Mary Ann Vitry

ATTACHMENT C

MEMORANDUM OF UNDERSTANDING WITH THIRD PARTIES

Memorandum of Understanding

by and among

**the United States Department of the Interior Bureau of Reclamation,
the San Joaquin River Exchange Contractors Water Authority,
the Central California Irrigation District,
the Firebaugh Canal Water District,
the San Luis Canal Company,
the Columbia Canal Company
the Merced Irrigation District,
the Turlock Irrigation District,
the Modesto Irrigation District,
the Oakdale Irrigation District,
the South San Joaquin Irrigation District,
the San Joaquin Tributaries Association,
the San Joaquin River Resource Management Coalition,
the Westlands Water District, and
the San Luis & Delta-Mendota Water Authority**
**Regarding Implementation of the Stipulation of Settlement in
Natural Resources Defense Council, et al. v. Kirk Rodgers, et al.**

A. Preface.

This Memorandum of Understanding (the “MOU”) is entered into by and between the United States Department of the Interior Bureau of Reclamation (“Reclamation”), as a party to the Stipulation of Settlement in Natural Resources Defense Council, et al. v. Kirk Rodgers, et al., Civ. No. S-88-1658 LKK/GGH (E.D. Cal.) (hereinafter “*NRDC v. Rodgers*”); and the San Joaquin River Exchange Contractors Water Authority, the Central California Irrigation District, the Firebaugh Canal Water District, the San Luis Canal Company, the Columbia Canal Company, the Merced Irrigation District, the Turlock Irrigation District, the Modesto Irrigation District, the Oakdale Irrigation District, the South San Joaquin Irrigation District, the San Joaquin Tributaries Association, the San Joaquin River Resource Management Coalition, the Westlands Water District, and the San Luis & Delta-Mendota Water Authority (collectively, the “Third Parties”). The foregoing entities that are signatories to this MOU are collectively referred to as the “Parties.”

Reclamation is a party to *NRDC v. Rodgers*, which concerns, among other things, the restoration and maintenance of flows and fisheries in the main stem of the San Joaquin River between Friant Dam and the confluence of the Merced River. A Stipulation of Settlement in *NRDC v. Rodgers* (the “Settlement”) was approved by the federal district court on October 23, 2006.

For purposes of this MOU, the Third Parties are or represent some of the entities or individuals located in the San Joaquin River Basin who are landowners adjacent to the San Joaquin River, or who use the waters of the San Joaquin River, tributaries of the San Joaquin River or the Sacramento-San Joaquin Delta, including persons or entities diverting or receiving water pursuant to applicable state and/or federal law. The Third Parties are not parties to the Settlement, however they did actively participate in crafting the enabling legislation and have an interest in the implementation of the restoration actions on the San Joaquin River, and the effects it may have on public and private property, water and hydroelectric operations on the San Joaquin River and its tributaries, the operations and funding of the Central Valley Project (CVP), land use, ongoing ecosystem, species and habitat restoration activities, water quality, and flood control operations, as well as an interest in maintaining the agricultural economy of the region. As provided in Paragraph 7 of the Settlement, Reclamation neither intends nor believes that the implementation of the Settlement or the implementing legislation will have a material adverse effect on the Third Parties, other interests not a party to the litigation, or on other streams or rivers tributary to the San Joaquin River. Reclamation believes that the Third Parties have special expertise with respect to implementation of certain elements of the Settlement and the implementing legislation and that the participation of the Third Parties will contribute to the success of the restoration plan for the San Joaquin River. The Third Parties will play a collaborative role in the planning, design, implementation and potential adaptation of the actions on the San Joaquin River called for by the Settlement and in the implementing legislation. As referred to in this MOU, the "implementing legislation" shall mean S. 27 and H.R. 24, introduced January 4, 2007, a copy of which is attached hereto as Exhibit A and incorporated herein by reference.

B. The Effect Of This MOU.

1. Nothing in this MOU precludes, or shall be interpreted to preclude, other interested parties from participation in processes designed to implement the Settlement. Additionally, the parties to this MOU acknowledge that as the implementation process moves forward, there may be other parties identified with substantially similar circumstances that may become signatories to this MOU or may execute other MOUs with Reclamation.

2. The implementing agencies are currently in the process of developing the internal organizational structures and procedures that will be used to implement the Settlement. The Parties to this MOU recognize that those organizational structures and procedures will undoubtedly continue to evolve as the Settlement is implemented. Nothing in this MOU precludes, or shall be interpreted to preclude, the implementing agencies from altering such organizational structures and procedures to better carry out the terms of the Settlement and the implementing legislation, provided, however, that such changes shall not interfere with the ability of the Third Parties to provide timely and comprehensive comments to the Secretary of the Interior (Secretary) through whatever organizational structure is developed.

3. Nothing in this MOU is intended to, nor shall it have the effect of, constraining, limiting or relieving any public entity in carrying out its statutory or contractual responsibilities or obligations. Entering into this MOU and agreeing to collaborate and work together to implement the Settlement shall not constitute an admission by the Third Parties as to the proper interpretation of any provision of law, nor is anything in this MOU intended to, nor shall it have the effect of, waiving or limiting any of the Third Parties' rights and remedies under any applicable law. The Third Parties specifically retain all rights of action or claims of relief with respect to the implementation of the Settlement that they may have under any applicable law. Nothing in this MOU is intended to, nor shall it have the effect of, amending, modifying or otherwise altering any provision of the Settlement or the Memorandum of Understanding between the Settling Parties and the State of California.

C. Specific Principles.

1. It is anticipated that the Secretary of the Interior, through Reclamation and the U.S. Fish and Wildlife Service, will implement the Settlement through a Program Management Team, and that implementation will be managed by a Program Manager. It is anticipated that the Program Manager will manage and coordinate the work of technical workgroups and will coordinate with the Restoration Administrator as provided in the Settlement.

2. The Third Parties intend to assist Reclamation and the other implementing agencies in the implementation of the Settlement consistent with the Third Parties' authorities and resources and consistent with the terms and conditions of the Settlement.

3. The Third Parties and Reclamation intend to work together in the planning, design, and implementation of appropriate aspects of the Settlement. Reclamation, along with the other implementing agencies and the Settling Parties, will be primarily responsible for implementing the Settlement. The Third Parties will assist with the implementation of the Settlement by providing data and technical analysis, modeling and other information necessary for successful implementation.

4. To implement the Settlement, the Program Management Team currently intends to establish at least four Technical Workgroups composed of implementing agency staff: a Water Management Workgroup, a Fish Management Workgroup, an Engineering and Design Workgroup, and a Planning, Environmental Compliance, and Permitting Workgroup. Other technical workgroups may be established as needed. It is envisioned that one or more stakeholder groups will be established. The Third Parties shall be included, where appropriate, on stakeholder groups associated with the Technical Workgroups to facilitate participation and input into the implementation of the Settlement.

5. The Third Parties agree to cooperate with Reclamation in the implementation of the Settlement, and Reclamation agrees to receive input from the Third Parties on matters relating to the reintroduction of salmonids, and the design and construction of channel and structural modifications and improvements, fish passage and fish screens,

and water operations. The Third Parties shall establish a Coordinating Committee to coordinate the efforts outlined in this MOU with Reclamation and to assist in the implementation of the Settlement. The Coordinating Committee may make recommendations as to implementation of the Settlement to minimize or offset impacts to Third Parties consistent with the process in Paragraph 19(b) of the Settlement. The recommendations may include, but are not limited to: timing of the Base Flow releases allocated during the period from March 1 through May 1 for the purpose of coordinating spring pulse flows on the lower San Joaquin River and its tributaries; planning, design and construction of channel and structural improvements called for in Paragraph 11 of the Settlement and the implementing legislation; the program for reintroducing Central Valley spring-run Chinook salmon called for in the implementing legislation; the acquisition and disposal of real property; levee design, construction, and maintenance; the conduct of a study to determine whether to expand channel and conveyance capacity to 4,500 cfs in reach 4B of the San Joaquin River or to use an alternate route for pulse flows and any action to expand reach 4B; and activities associated with carrying out the Water Management Goal, including, but not limited to, recirculation, recapture, reuse exchange or transfer of Restoration Flows. Consistent with the Settlement, the Program Manager will use reasonable efforts under the circumstances to provide to the Coordinating Committee any recommendation by the Restoration Administrator to the Secretary or the Secretary's designee regarding a matter that is a subject of this MOU. Any comments from the Coordinating Committee to the Secretary or the Secretary's designee shall be provided in a timely manner.

6. It is the intent of Reclamation to work closely with affected landowner groups and/or affected individual landowners, in the areas represented by the Third Parties in order to effectuate the Settlement and the implementing legislation. Reclamation agrees that the involvement of private landowners is crucial to ensuring the success of the Settlement. The Third Parties shall establish a Landowner Committee to coordinate the implementation of the Settlement with the private landowners they represent and to provide for the dissemination of information to those landowners.

7. It is the intent of Reclamation to work closely with affected landowners groups and/or affected landowners in other areas of the River or the Delta in order to effectuate the Settlement and the implementing legislation. Reclamation may enter into agreements with landowners in those areas or areas represented by the Third Parties, as necessary, regarding the construction, implementation, operation, and/or maintenance of the facilities including the Phase 1 and Phase 2 Improvements identified in the Settlement.

D. Additional Provisions.

1. This MOU shall take effect on the date signed and shall terminate on December 31, 2026, unless extended by written agreement of all of the Parties.

2. Any provision of this MOU may be modified or amended, including modification to add parties, only by written agreement executed by all of the Parties.

3. Any Party to this MOU wishing to withdraw from this MOU must provide a written notice to each other Party hereto specifying the reason the notifying Party wishes to withdraw. The Parties shall promptly meet and confer in a good faith effort to address and resolve, if possible, the issue(s) causing the notifying Party to wish to withdraw from this MOU. If following such meeting the notifying Party still wishes to withdraw, such Party may withdraw 30 days after the date of the written notice.

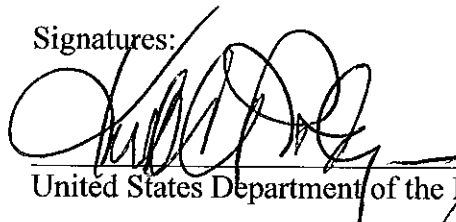
4. The expenditure or advance of any money or the performance of any obligation of the United States under this MOU shall be contingent upon appropriation or allotment of funds. No liability shall accrue to the United States for failure to perform any obligation under this MOU in the event that funds are not appropriated or allotted.

5. This MOU may be signed in two or more counterparts each of which, when executed and delivered, shall be an original and all of which together shall constitute one instrument, with the same force and effect as though all signatures appeared on a single document.


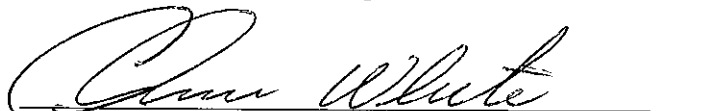
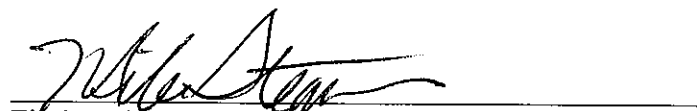

6. Each signatory to this MOU certifies that he or she is authorized to execute this MOU on behalf of the Party he or she represents, and that such Party shall be fully bound by the terms hereof upon such signature without further act, approval, or authorization of such Party.

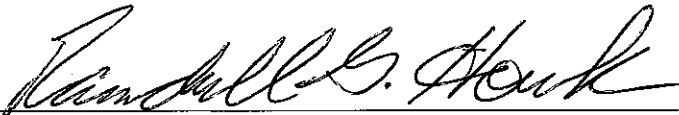
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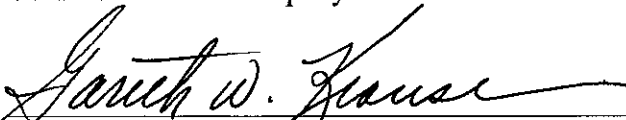
Signatures:

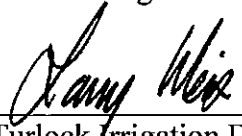


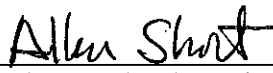
United States Department of the Interior Bureau of Reclamation

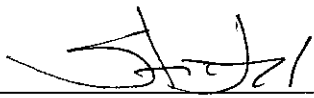

San Joaquin River Exchange Contractors Water Authority
Central California Irrigation District
Firebaugh Canal Water District
San Luis Canal Company


Columbia Canal Company

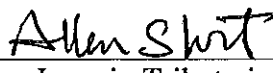

Merced Irrigation District


Turlock Irrigation District



Modesto Irrigation District

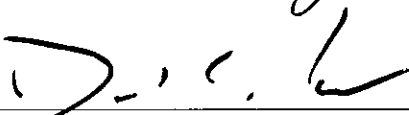

Oakdale Irrigation District


South San Joaquin Irrigation District


San Joaquin Tributaries Association


San Joaquin River Resource Management Coalition


Westlands Water District


San Luis & Delta-Mendota Water Authority

ATTACHMENT D

MS PROJECT PROGRAM SCHEDULE

ID	Task Name	Calendar Days	Start	Finish	Predecessors	Qtr 1, 2007			Qtr 2, 2007			Qtr 3, 2007			Qtr 4, 2007			Qtr 1, 2008			Qtr 2, 2008			Qtr 3, 2008			Qtr 4, 2008			Qtr 1, 2009			Qtr 2, 2009			Qtr 3, 2009			Qtr 4, 2009		
						Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
184	Preparation of Final Alternatives Report	180 days	Mon 3/30/09	Fri 9/25/09	181,183																																				
185																																									
186	NHPA Section 106 Consultation Requirements	851 days	Tue 5/1/07	Fri 8/28/09	9																																				
187	Fish & Wildlife Coord Act Report	851 days	Tue 5/1/07	Fri 8/28/09	186SS																																				
188	Essential Fish Habitat Consultation w/ NMFS	851 days	Tue 5/1/07	Fri 8/28/09	187SS																																				
189	Acquire Section 404 Permit from USACE	851 days	Tue 5/1/07	Fri 8/28/09	188SS																																				
190																																									
191	Preparation of Draft EIS/R	130 days	Mon 2/2/09	Thu 6/11/09																																					
192	Prepare Admin Draft EIS/R	85 days	Mon 2/2/09	Mon 4/27/09																																					
193	Review/Comments Period on Admin Draft EIS/R	30 days	Tue 4/28/09	Wed 5/27/09	192																																				
194	Comments Incorporated in Admin Draft EIS/R	14 days	Thu 5/28/09	Wed 6/10/09	193																																				
195	Issue Draft EIS/R	1 day	Thu 6/11/09	Thu 6/11/09	194																																				
196																																									
197	Preparation of Final EIS	111 days	Fri 6/12/09	Wed 9/30/09																																					
198	Review Comment Period on Draft EIS/R	29 days	Fri 6/12/09	Fri 7/10/09	195																																				
199	Collate and Respond to Comments on Draft EIS/R	20 days	Sat 7/11/09	Thu 7/30/09	198																																				
200	Administrative Final Draft EIS/R Issued for Review	1 day	Fri 7/31/09	Fri 7/31/09	199																																				
201	Review/Comment Period for Admin Final EIS	31 days	Sat 8/1/09	Mon 8/31/09	200																																				
202	Incorporate Comments on Administrative Final Draft EIS	21 days	Tue 9/1/09	Mon 9/21/09	201																																				
203	Prepare and Final ROD and NOD	21 days	Sat 8/1/09	Fri 8/21/09	200																																				
204	Issue Final Final EIS/R	6 days	Sat 8/22/09	Thu 8/27/09	203																																				
205	Wait Period Before Sign ROD / NOD	30 days	Fri 8/28/09	Sat 9/26/09	204																																				
206																																									
207	Sign Record of Decision / Notice of Determination	4 days	Sun 9/27/09	Wed 9/30/09	205																																				
208																																									
209																																									
210	Stage 2 -- 10/1/09 to 12/31/13	1484 days?	Sun 9/27/09	Sat 10/19/13																																					
211	Reach 2B - Mendota Pool Bypass Channel Sized for 4,500 cfs (Contract 1 & 2)	1147 days	Sun 9/27/09	Fri 11/16/12																																					
230	Reach 2B - Modify Channel Incorporating New Floodplain and Riparian Habitat with levees & Q=4,500 cfs (Contract 3 & 4)	1479 days	Thu 10/1/09	Fri 10/18/13																																					
247	Reach 4B - Modify SJR channel to Ensure Conveyance of 475 cfs Through Reach 4B (Contract 5)	748 days	Thu 10/1/09	Tue 10/18/11																																					
262	Reach 4B - Modify Head Gate on SJR to Ensure Fish Passage and Routing 500 - 4,500 cfs into Reach 4B (Contract 6)	1110 days	Fri 10/1/10	Mon 10/14/13																																					
294	Reach 4A End - Modify Sand Sl. Structure to Ensure Fish Passage (Contract 7)	1109 days	Fri 10/1/10	Sun 10/13/13																																					
310	Reach 3 - Screen Arroyo Canal (650cfs) to Prevent Fish Entrapment (Contract 8)	1109 days	Fri 10/1/10	Sun 10/13/13																																					
326	Reach 3 - Modify Sack Dam to Ensure Fish Passage (Contract 9)	1109 days	Fri 10/1/10	Sun 10/13/13																																					
342	Reach 4B - Modify Structures in Eastside and Mariposa Bypasses to provide Fish Passage (Contract 10)	748 days	Mon 10/3/11	Sat 10/19/13																																					
357	Reach 4B - Modify Eastside and Mariposa Bypasses to Provide Suitable Low-Flow Channel (Contract 11)	748 days	Mon 10/3/11	Sat 10/19/13																																					
372	Reach 4B - Construct Seasonal Barriers to Prevent Fish Migration into Salt and Mud Sloughs (Contract 12)	748 days	Mon 10/3/11	Sat 10/19/13																																					
387																																									
388	Salmon Reintroduction Permit	943 days	Thu 10/1/09	Mon 4/30/12																																					
389	Permitting Process	364 days	Thu 10/1/09	Wed 9/29/10	116																																				
390	Submit Permit to NMFS	1 day	Thu 9/30/10	Thu 9/30/10	389																																				
391	NMFS Determination	575 days	Mon 10/4/10	Mon 4/30/12																																					
392																																									
393	START - Interim Flow releases down the SJR (500 cfs)	1 day?	Thu 10/1/09	Thu 10/1/09																																					
394	START - Restoration Flow Releases down SJR (4500 cfs)	1 day?	Mon 10/1/12	Mon 10/1/12																																					
395																																									
396																																									
397	Stage 3 -- 1/1/14 to 12/31/25	2206 days	Fri 10/1/10	Fri 10/14/16																																					
398	Reach 4B - Modify SJR Channel for 4,500 cfs w/ New Flood Plain & Riparian Habitat (Contract 13)	1475 days	Mon 10/1/12	Fri 10/14/16																																					
415	Reach 2B - Modify Chowchilla Byfurcation Structure to Ensure Fish Pa	1099 days	Fri 10/1/10	Thu 10/3/13																																					
431	Reach 1- Fill and/or Isolate Highest Priority Gravel Pits (Contract 15)	855 days	Mon 10/7/13	Mon 2/8/16																																					
447	Reach 4A End - Modify Sand Slough Control Structure to Route 4,500 cfs into Reach 4B (Contract 16)	1099 days	Fri 10/1/10	Thu 10/3/13																																					
463																																									
464	Restoration Flow Releases (4500 cfs)	1 day	Wed 1/1/14	Wed 1/1/14																																					
465	Monitoring and Report	1 day	Wed 1/1/14	Wed 1/1/14																																					

ATTACHMENT E

DRAFT FISHERY MANAGEMENT PLAN OUTLINE

Fishery Management Plan Outline

The FMW identified the following draft list of 20 sections to be developed for the Fishery Management Plan. This list is based on their review of nine Fishery Management Plans developed for other West Coast watersheds as well as a 2004 report by Hansen Environmental, Inc. titled *Review of Fishery Management Plans and Related Scientific Literature for Regulated Rivers*:

1. Executive Summary
2. Table of Contents
3. List of Figures
4. List of Tables
5. List of Abbreviations
6. Introduction
 - a. Purpose or goal
 - b. Background to the plan including a summary of the key elements of the Settlement that involve fish management;
 - c. Description of the planning team; and
 - d. Scope of the plan.
7. Legal and Policy Context
 - a. Citation of laws and regulations governing the planning process; and
 - b. Brief analysis of how law and regulation constrain the scope of the plan.
 - c. Consistency with ESA/CESA, CWA, other laws.
8. Status Review
 - a. Regional setting;
 - b. Land use and habitat characteristics;
 - c. Watershed characteristics;
 - d. Hydrology;
 - e. Physical facilities affecting the fishery;
 - f. Fish, wildlife, and plant populations;
 - g. Plan target species and their life histories; and
 - h. Trends in the status of plan target species.
9. Problem Analysis
 - a. A listing of management problems which are to be addressed in the plan and how the problem negatively affects target and non-target species
 - b. Conceptual and quantitative population models describing the environmental factors that are expected to affect the production of spring-run and fall-run Chinook salmon in the San Joaquin River.
 - i. Describe the Settlement parties' conceptual model that was used to develop the Restoration Hydrographs (Exhibit B) and Channel and Structural Improvements (Paragraph 11).
 - ii. Develop alternative conceptual models, which would be continuously revised as new information becomes available.
 - iii. Develop quantitative model(s).
 - iv. Describe functions of the models:

1. Identify likely limiting factors that will require restoration or other remedies;
 2. Develop population goals for spring run and fall-run Chinook salmon, other performance measures, and metrics;
 3. Help guide habitat restoration and flow management;
 4. Identify key uncertainties, data needs, and develop testable hypotheses; and
 5. Identify criteria for construction and operation of water management and fish protection facilities.
10. Planning Criteria, Planning Process, Plan Assumptions
- a. Description of the planning team and any advisory committees;
 - b. Description or tabulation of the formal steps in planning;
 - c. List of criteria used in making decisions or recommendations; and
 - d. List of key assumptions.
11. Strategies/Objectives
- a. Maintain naturally-reproducing and self-sustaining populations of salmon and other fish in “good condition”
 - i. spring run Chinook, highest priority
 - ii. fall-run Chinook
 - iii. potential conflicts between fall-run and spring run
 - iv. other fish
 - b. Viable Population Sizes and Quantitative Population Goals
 - i. salmon population objectives
 - ii. define role of hatcheries
 - c. Habitat Objectives
 - i. channel form and function
 - ii. spawning gravels
 - iii. holding habitat
 - iv. floodplain habitat
 - v. water temperature
 - vi. riparian vegetation
 - vii. water quality
 - d. Passage Objectives
 - i. Ladders
 - ii. Screens
 - iii. Passage flows
 - e. Legal and Illegal Harvest
12. Alternatives: A list of alternatives considered and the rationale for not pursuing them (usually in terms of not meeting one of the planning criteria).
13. Plan Description
- a. Actions described in the Settlement;
 - i. Channel and structural improvements from Paragraph 11;
 - ii. Environmental compliance for channel and structural improvements completed by Sep 2009;
 - iii. Apply for a permit from the National Marine Fisheries Service to reintroduce spring run by 30 September 2010;

- iv. Interim flow studies between October 2009 and January 2014;
 - v. Reintroduce and manage spring run and fall-run Chinook salmon by December 2012;
 - vi. Begin full restoration flows no later than January 2014;
 - b. Flow Management (Hydrograph Flexibility and Buffer Flows);
 - c. Additional Habitat Restoration Recommended by FMW and the RA;
 - d. Fisheries Monitoring Plan;
 - e. Fisheries Adaptive Management Plan; and
 - f. Communication Plan addressing all reporting requirements.
- 14. Impacts/Benefits
 - a. A list of predicted benefits to the targeted fishery and/or ecosystem; and
 - b. A full analysis of direct and indirect impacts.
- 15. Implementation Plan: As described in the Program Management Plan
 - a. Implementation priorities;
 - b. Implementation responsibilities;
 - c. Funding;
 - d. Contingencies;
 - e. Program administration; and
 - f. External review.
- 16. Fishery Monitoring Plan
 - a. Define monitoring objectives:
 - i. Long-term research program designed to evaluate uncertainties regarding restoration goal and downstream impacts;
 - ii. Monitoring to help guide the use of Buffer flows and flexibility in the hydrographs;
 - iii. Monitoring potential impacts of recirculation, recapture, reuse, exchange or transfer of the Interim Flows and Restoration Flows; and
 - iv. Monitoring the production and escapement of spring- and fall-run Chinook salmon.
 - b. List data needs and testable hypotheses.
 - i. Annual monitoring (data needs);
 - ii. Focused studies (testable hypotheses); and
 - iii. Develop metrics to assess progress at project and program level.
 - c. Describe monitoring methods, and how they are linked to specific project elements or objectives;
 - d. Responsible Parties that will carry out the monitoring and reporting;
 - e. Funding;
 - f. Term;
 - g. External Peer Review; and
 - h. How data would be used for management.
- 17. Fishery Adaptive Management Plan
 - a. Specific issues to which adaptive management approaches would be applied;
 - b. Consequences if monitoring is not conducted;
 - c. The range of actions to be considered;

- d. Monitoring and/or research required to "trigger" an adaptive management action;
 - e. Responsible parties; and
 - f. The role of technical advisory committee or management committee in deciding when to implement adaptive management and what to recommend.
18. Projected schedule for implementation, at least covering major phases of the proposed management
19. Linkages with Other Programs
20. References

ATTACHMENT F

SETTLEMENT ACTIONS MATRIX

San Joaquin River Restoration Settlement Actions Summary

Program Management Team (PMT): Representatives of five implementing agencies to guide and supervise settlement implementation (USBR, DWR, USWFS, DFG and NMFS)

Work Groups: Multi-agency technical groups to implement settlement provisions (Water Management; Engineering & Design; Planning, Environmental Compliance & Permitting; and Fishery Management)

Anticipated Actions based on Settlement Agreement and Memorandum of Understanding with the State				
No.	Document (Section)	Page No.	Actions	Due Date
1	Stipulation 8	6	Congress to pass authorizing "San Joaquin River Restoration Settlement Act" (Exhibit A)	Ongoing
2	Stipulation 8	6, 7	Additional Appropriations by Congress.	Ongoing
3	Stipulation 9	7	Upon Settlement Approval, Secretary to commence implementation of Paragraph 11 channel and structural improvements (in a manner compatible with Paragraph 15)	9/23/2006
4	Stipulation 9	7	Secretary to consult with Restoration Administrator in the implementation of Paragraph 11	Ongoing
5	Stipulation 11	8	Complete Phase 1 Improvements. Secretary to designate staff from Reclamation, FWS, NMFS and other appropriate agencies to provide assistance in implementation.	12/31/2013
6	Stipulation 11 (a) (1)	8	Creation of bypass channel around Mendota Pool to ensure conveyance of at least 4,500 cfs from Reach 2B to Reach 3. (Requires completion of structure capable of directing flow down bypass allowing deliveries of SJR water into Mendota Pool when necessary.)	12/31/2013
7	Stipulation 11 (a) (2)	8	Channel capacity modifications (incorporating new floodplain and riparian habitat) to ensure conveyance of at least 4,500 cfs in reach 2B between Chowchilla Bifurcation Structure and new Mendota Pool bypass channel.	12/31/2013
8	Stipulation 11 (a) (3)	8	Modifications in SJR channel capacity if necessary to ensure 475 cfs through Reach 4B.	12/31/2013
9	Stipulation 11 (a) (4)	8	Modifications at Reach 4B headgate on the SJR channel for fish passage and to enable flow routing of between 500 cfs and 4,500 cfs into Reach 4B.	12/31/2013
10	Stipulation 11 (a) (5)	8	Sand Slough modifications to ensure fish passage.	12/31/2013
11	Stipulation 11 (a) (6)	9	Screening of Arroyo Canal water diversion upstream of Sack Dam to prevent entrainment of anadromous fish.	12/31/2013
12	Stipulation 11 (a) (7)	9	Modifications at Sack Dam for fish passage.	12/31/2013
13	Stipulation 11 (a) (8)	9	Modifications to structures in the Eastside and Mariposa Bypass channels to the extent needed to provide anadromous passage on an interim basis until completion of Phase 2 improvements.	12/31/2013
14	Stipulation 11 (a) (9)	9	Modifications in the Eastside and Mariposa Bypass channels to establish a suitable low flow channel (if Secretary in consultation with RA determines necessary).	12/31/2013
15	Stipulation 11 (a) (10)	9	Modifications to enable deployment of seasonal barriers to prevent adult anadromous fish from entering false migration pathway in area of Salt and Mud Sloughs.	12/31/2013
16	Stipulation 11 (b)	8	Complete Phase 2 improvements. Secretary to designate staff from Reclamation, FWS, NMFS and other appropriate agencies to provide assistance in implementation.	12/31/2016
17	Stipulation 11 (b) (1)	10	Secretary in consultation with RA and with concurrence of NMFS and FWS makes determination of whether 11 (b) (1) modification substantially enhances achievement of restoration goal.	12/31/2016
18	Stipulation 11 (b) (1)	9	Modifications in SJR channel capacity (incorporating new floodplain and related riparian habitat) to ensure conveyance of at least 4,500 cfs through reach 4B.	12/31/2016
19	Stipulation 11 (b) (2)	10	Secretary in consultation with RA and with concurrence of NMFS and FWS makes determination of whether 11 (b) (2) modifications are necessary to achieve restoration goal.	12/31/2016
20	Stipulation 11 (b) (2)	10	Modifications to Chowchilla Bifurcation Structure to provide fish passage and prevent entrainment.	12/31/2016
21	Stipulation 11 (b) (3)	10	Secretary in consultation with RA makes determination of highest priority gravel pits in Reach 1, based on relative potential for reducing juvenile salmon mortality.	12/31/2016
22	Stipulation 11 (b) (3)	10	Filling and/or isolating the highest priority gravel pits in Reach 1.	12/31/2016
23	Stipulation 11 (b) (4)	10	Modifications to the San Slough Control Structure to enable effective routing and conveyance of Restoration Flows up to 4500 cfs into Reach 4B	12/31/2016
24	Stipulation 12	10	Identify and recommend additional improvements and potential measures to the Secretary that may further enhance the success of achieving the Restoration Goal.	Ongoing

25	Stipulation 13 (c) (1)	12	Secretary to acquire from willing sellers at least 40,000 acre-feet of water (or options) prior to commencement of restoration flows, unless RA indicates a lesser amount is required.	1/1/2014
26	Stipulation 13 (c) (2) (B) (i), (ii)	13	Secretary shall have available from willing sellers at least 28,000 acre-feet of water (or options) and up to an additional 10,000 acre-feet if recommended by RA; and store unused water, if storage is available.	1/1 of each year
27	Stipulation 13 (c) (2) (B) (iv)	13	Secretary shall provide notice to Plaintiffs and Friant Parties on status of water acquisitions and follow procedures pursuant to 13 (c) (2) (iv)	12/1 of each year
28	Stipulation 13 (f)	14	Parties shall work together to identify increased seepage and identify steps to prevent or redress.	Ongoing
29	Stipulation 13 (g)	14	Measure Restoration Flows at Friant Release; Gravelly Ford; Chowchilla Bifurcation Structure; below Sack Dam; top of Reach 4B; and at the confluence of the Merced River.	1/1/2014
30	Stipulation 13 (h)	15	Secretary, in cooperation with Plaintiffs and Friant Parties, retain, acquire or perfect Water Rights to manage and control Restoration Flows; including permit modifications, enforcement proceedings.	Ongoing
31	Stipulation 13 (i)	15	Secretary to commence the Restoration Flows at the earliest possible date, consistent with the Restoration Goal. RA to recommend to the Secretary the date for commencement of the Restoration Flows.	1/1/2014
32	Stipulation 13 (j)	16-17	Prior to commencement of Restoration Flows, Secretary shall develop guidelines on procedures for determining water year types, timing of Restoration Flows consistent with the hydrographs, procedures for measurement, monitoring, and reporting of daily releases, rate of flow, accounting for reduction of deliveries, methodology for determining seepage losses and/or downstream surface or underground diversions beyond current levels, procedures for real-time changes to actual releases from Friant Dam, and procedures for determining the extent to which flood releases meet Restoration Flows.	1/1/2014
33	Stipulation 14	17	Secretary, through FWS, and in consultation with Secretary of Commerce, DFG, and the RA shall ensure that spring run and fall run Chinook salmon reintroduced between Friant Dam and Merced River.	12/31/2012
34	Stipulation 14 (a)	18	FWS shall submit a permit application to NMFS for the reintroduction of spring run Chinook salmon as soon as practical but not later than Sept. 30, 2010.	9/30/2010
35	Stipulation 14 (a)	18	NMFS to issue a decision on the permit application for the reintroduction of spring run Chinook salmon as expeditiously as possible but no later than April 30, 2012.	4/30/2012
36	Stipulation 14 (a)	18	NMFS to address incidental take issues in Settlement implementation BO(s) and, as appropriate, ESA authorities including Section 4(d) rules and Section 10 permits public processes.	4/30/2012
37	Stipulation 14 (b)	18	RA shall provide Secretary with recommendations designed to reintroduce spring run and fall Chinook salmon; Secretary to include these recommendations in planning and decision-making; Secretary to provide RA written explanation if declining to follow RA recommendations.	12/31/2012
38	Stipulation 15	18	Secretary shall begin program of Interim Flows, including additional releases from Friant Dam.	10/1/2009
39	Stipulation 15	19	RA shall develop and recommend to the Secretary an Interim Flows program, in consultation with TAC, Secretary and other appropriate federal and local agencies.	10/1/2009
40	Stipulation 15 (a)	19	Secretary anticipated to release interim flows (10/1/2009-11/20/2009).	10/1/2009
41	Stipulation 15 (b)	19	Secretary anticipated to release interim flows (2/1/2010 - 12/1/2010).	2/1/2010
42	Stipulation 15 (c)	19	Secretary anticipated to release interim flows 2/1-5/1 in 2011 and 2012, assuming in channel construction begins 5/1; release flows to wet channel down to Chowchilla Bifurcation Structure to collect information regarding infiltration losses 5/1-9/1 in 2011 and 2012.	2/1/2011
43	Stipulation 15 (d)	20	Secretary anticipated to release flows for entire year, if highest priority channel improvements identified in 11(a) not completed.	12/31/2013
44	Stipulation 15 (e)	20	Secretary shall, in consultation with RA, determine existing channel capacity and impact of Interim Flows on channel construction work.	10/1/2009
45	Stipulation 16 (a)	20	Secretary, in consultation with the Plaintiffs and Friant Parties, shall develop plan for recirculation, recapture, reuse, exchange or transfer of the Interim Flows and Restoration Flows to reduce impacts to water deliveries to long-term Friant Division contractors per 16(a)(1)-(4).	10/1/2009
46	Stipulation 16 (b)	21-22	Secretary to establish a Recovered Water Account (RWA) per 16 (b) (1)-(5) to make water available to Friant Division long-term contractors who provide water to meet Interim Flows and Restoration Flows.	10/1/2009
47	Stipulation 17	22-23	RA shall make recommendations to the Secretary concerning hydrograph implementation and buffer flows to meet Restoration Goals, consulting with TAC.	Ongoing
48	Stipulation 19 (a)	23	Secretary to develop procedures for coordinating technical assistance, regulatory compliance and information sharing with other state and federal agencies with responsibilities related to the Restoration Goal, and RA and TAC.	2007

49	Stipulation 19 (a)	23	Secretary and Secretary of Commerce shall designate staff from Reclamation, FWS, NMFS, to act as liaisons to the TAC.	2007
50	Stipulation 19 (a)	23-24	Secretary and Secretary of Commerce shall designate staff from Reclamation, FWS, NMFS; may create agency groups to implement Settlement; including assistance to RA and TAC; Secretary may enter into MOU/A(s) to facilitate Settlement implementation.	10/23/2006
51	Stipulation 19 (b)	24	Secretary shall, in cooperation with other Parties, provide appropriate opportunities for input from third parties who have an interest in measures undertaken per Settlement; coordination with third parties who own or control facilities or property affected by implementation of Settlement measures.	2007
52	Stipulation 19 (b)	24	Secretary, shall, in cooperation of the other Parties, provide appropriate opportunities for public participation regarding implementation of the Settlement.	2007
53	Stipulation 21 (a) (1)	27	At the beginning of the fiscal year following enactment of legislation, Secretary to dedicate payments made pursuant to CVPIA 3406 (c) (1) directly or to support bond or loan (issues/entered into by the State of California) and allocate up to 2 million dollars annually of restoration charges pursuant to CVPIA 3407(d)(2)(a).	Ongoing
54	Stipulation 21 (a) (2)	27	From the fiscal year following enactment of legislation, for 9 fiscal years thereafter, Secretary to dedicate the capital component of payment made by the Friant Division of long-term contractors pursuant to long-term water service contracts directly or to support a bond or loan (issued/entered into by State of California).	Date of enactment of legislation
55	Stipulation 21 (d)	29	Secretary shall negotiate agreement(s) with the State of California by which the State is to participate in the implementation of the Settlement through funding and other means.	Ongoing
56	Stipulation 22 (b)	30-31	Friant Division and the Hidden and Buchanan Units contracts to be amended to add Paragraphs 22(b)(1) through 22(b)(4); Secretary shall ensure contract amendments have been executed within 90 days of effective date of Settlement.	1/23/2007
57	Stipulation 28	35	Secretary shall initiate and expeditiously complete applicable environmental documentation and consultations.	Ongoing
58	Stipulation 29	35	Parties shall establish procedures for providing notice of agreements with third-parties to implement Settlement; agreements shall be made available to parties.	Ongoing
59	Stipulation 46	39	Parties shall designate point of contact for all notices and consultations required by the Settlement.	Ongoing
60	S. MOU	2	Within 90 days of execution of MOU, Secretaries of the Interior, Commerce, and the California State Secretary for Resources and Secretary of CalEPA establish a process for the State and Federal agencies to implement the Settlement.	1/23/2007
61	S. MOU	2,3	The Secretary of the Interior and the CA Secretary of Resources, in cooperation with Settling Parties, shall establish or convene new or existing working groups, technical committees, or advisory councils, as appropriate, to assure public participate and input into the implementation of the Settlement.	Ongoing
62	S. MOU	4	Implement Chapter 5, section 75005 (n) of the "Bond Act" so that \$100 million is expended consistent with the MOU to implement the Settlement.	Ongoing

ATTACHMENT G

**SAN JOAQUIN RIVER RESTORATION PROGRAM
PUBLIC INVOLVEMENT PLAN**

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The San Joaquin River Restoration Program is one of the most complex fish restoration and water management challenges in California today. This Public Involvement Plan describes how the federal and state agencies implementing the restoration intend to inform and involve all levels of leaders, managers, stakeholders, and the general public. The program has an aggressive schedule to accomplish major milestones. Effective communication and coordination with all interested and affected parties will help ensure that decision-makers are fully informed and program actions are implemented efficiently and effectively.

1 PROJECT BACKGROUND

The Stipulation of Settlement in *NRDC, et al., v. Rodgers, et al.*, signed September 2006 concluded an 18-year legal dispute and established a 20-year plan to restore flows and fish to the main stem of the San Joaquin River. The Settlement also provided strategies to minimize the impact of water loss to the Bureau of Reclamation's agricultural and urban water contractors. A five-agency, Federal and State Program Management Team has been convened to begin identifying information needs, planning implementation strategies, and developing a Program organization structure. The five agencies include: Bureau of Reclamation (Reclamation), U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), California Department of Water Resources (DWR) and California Department of Fish and Game (DFG). The San Joaquin River Restoration Program (Program) will work towards the two main goals of the settlement: restoring water flows and salmon to the San Joaquin River below Friant Dam, and providing water supply certainty for the farmers and cities in the Friant service area who rely on water from the river.

2 PUBLIC INVOLVEMENT APPROACHES

2.1 ALTERNATIVE APPROACHES FOR PUBLIC INVOLVEMENT

There are a variety of ways to engage the public in program planning and implementation. The approaches can be divided into four general categories, encompassing a continuum of varying degrees of public involvement (Bishop, 1997):

- A presentation or basic information program that focuses on providing information about a particular project to stakeholders.
- A review and comment program that focuses on providing information to receive feedback and opinions back from stakeholders about a particular project and/or proposed action.
- An advice and consultation program that focuses on providing information to receive advice about solutions and/or a process that would be responsive to issues/concerns identified by stakeholders.
- A negotiation and consensus program that focuses on agency and stakeholders seeking mutual agreement on actions to be taken for a particular project.

Each of the approaches described above is suitable for specific types of decision-making processes by government agencies. While this continuum is presented as four general categories, it is important to note that every public involvement program is unique. The

common purpose in all public involvement programs is clear communication about the project, the steps involved for the project, key decision points, and how the public can participate in decision-making.

2.2 RECOMMENDED APPROACH AND RATIONALE

Consistent with the Settlement among the NRDC Coalition, the Friant Water Users Authority, the U.S. Department of Commerce and the U. S. Department of the Interior, the implementing agencies have chosen to proceed with a public involvement program that closely resembles the advice and consultation approach with applied negotiation and building agreement as necessary elements of collaboration. This approach supports the coordination among and appropriate input from agencies, Settling Parties, Third Parties, and others, as called for in the Settlement. The project schedule calls for restoration and water management studies and National Environmental Policy Act/California Environmental Quality Act review to be completed before construction or operational changes can begin on the restoration program. The public involvement program is designed to provide numerous opportunities for input and dialogue over the course of the Program milestones.

The advice and consultation approach is appropriate when there is a pre-existing framework for the decision making process, such as the Settlement or the pending federal legislation. The actions described in the Settlement to be implemented will be evaluated through the NEPA/CEQA process. However, the public can still significantly influence the process and final outcome for a project. Stakeholders will be involved throughout the process, from generating and evaluating conceptual alternatives, to providing formal comments on draft documents.

The San Joaquin River Restoration Program is of local, regional, state, and national interest. The scale of the project poses both opportunities and challenges for a widespread public involvement program.

The scope of the restoration involves a broad range of topics (many of which are complex) and the environmental review process will consider a number of alternatives. This complexity highlights the need to provide accurate, easy-to-understand, timely information throughout the Program so that stakeholders and the public will be able and willing to provide informed input at key decision points in the process.

The Public Involvement Plan is designed to include people at varying levels of interest. It is expected that some groups will be more active, or more involved in the technical elements of the Program than others. The public involvement process is designed to educate and encourage input, regardless of the amount of previous involvement and background particular individuals or groups might have.

2.3 GOALS

This Public Involvement Plan (“PIP”) is being developed to create an open and visible process through which the general public, stakeholders, Settling Parties, Third Parties, elected officials, academic institutions, and other interested parties can keep track of

Program activities and progress as well as participate in the identification of Program issues and formulation of alternatives.

The goals of the PIP are to:

- Identify and include all interested and affected governments, agencies, academic institutions, scientists and researchers and stakeholders;
- Provide accurate, easy-to-understand, timely information on issues and activities throughout the process;
- Encourage and solicit agency and public comments on all aspects of the Program, well before key decision points;
- Incorporate comments/feedback received into the process and key decisions; and
- Ensure the letter and spirit of the California Environmental Quality Act/National Environmental Policy Act and any other appropriate environmental laws are followed with respect to disclosure and opportunities to comment.

2.4 PUBLIC INVOLVEMENT STRATEGIES

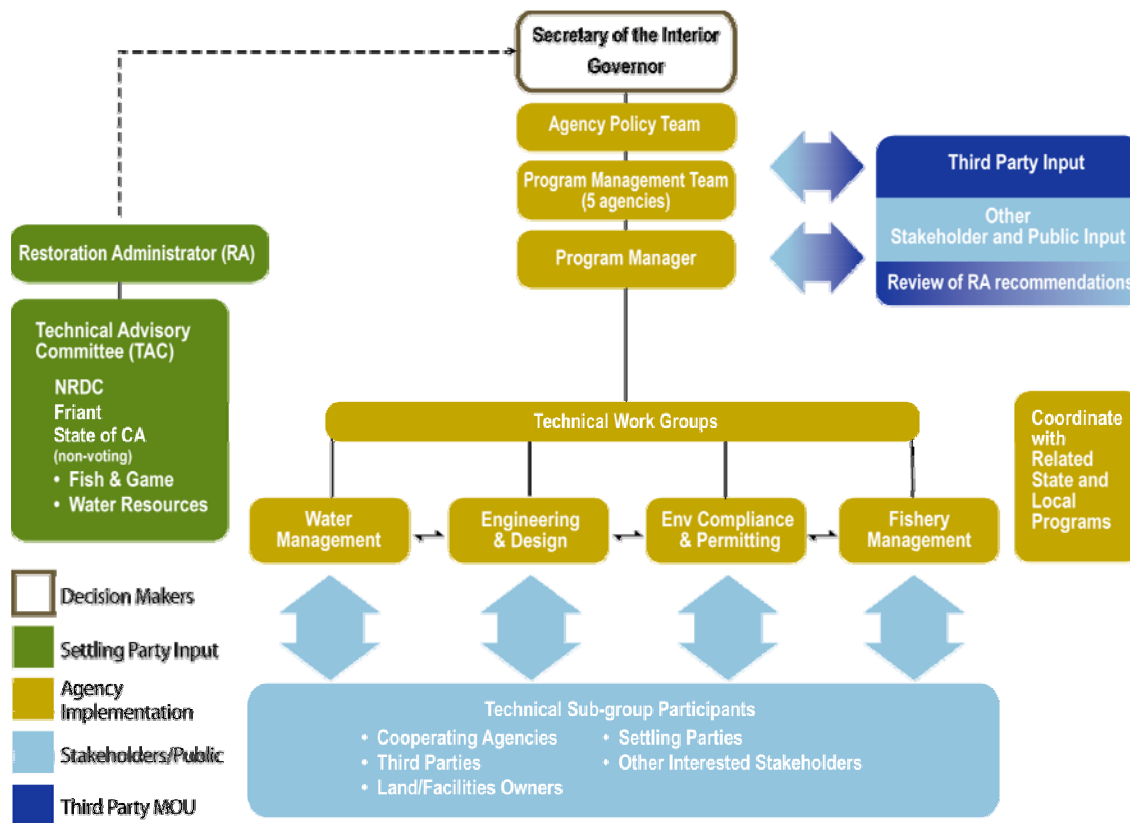
To reach these goals, the Program will implement the following public outreach and involvement strategies:

- Establish multiple means of informing Settling Parties, Third Parties (signatories to a Memorandum of Understanding), stakeholders, elected officials, other agencies and entities including counties, academic institutions, agricultural organizations, regional organizations with an interest in water and fisheries, and the public about the Program.
- Actively solicit information, resources, feedback and opinions from the above groups and interested individuals and organizations.
- Rely on three core strategies:
 - Proactive initial outreach and ongoing outreach and involvement at project milestones.
 - Partnerships with local organizations to reach out and involve constituents and explore opportunities for joint public outreach and involvement opportunities.
 - Opportunities for stakeholder participation in Technical Subgroup discussions.
- Conduct all activities in an open and transparent manner. Present restoration plans as works-in-progress and develop a transparent system for receiving and addressing stakeholder and public comments.
- Conduct SJRR Program outreach as a single multi-agency effort. Use a five-agency Public Affairs Team to ensure coordinated and consistent public outreach and involvement.

2.5 SETTLEMENT AND MOU REQUIREMENTS

The Settlement contemplates that the implementing agencies provide appropriate opportunities for input to interested stakeholders, parties who own or control facilities or may be affected by the Restoration Program, and the public. Additionally, the Settlement and the Memorandum of Understanding between the State of California and the Settling Parties (State MOU) calls for the Secretary of the Interior and the California Secretary for Resources, in cooperation with Settling Parties, to establish or convene new or existing working groups, technical committees, or advisory councils, as appropriate, to assure public participation and input into the implementation of the Settlement.

The following diagram shows how the implementing agencies have structured the program to implement the restoration and coordinate with Settling Parties, interested stakeholders, and the general public.



2.6 PUBLIC AFFAIRS COORDINATION

In order to coordinate all public outreach and input efforts, a five-agency Public Affairs Team (PAT) made up of the implementing agencies has been created. The PAT is charged with coordinating a comprehensive and streamlined public information and outreach strategy in consultation with the Program Management Team and the Technical Working Groups throughout the duration of the Settlement implementation. Tasks include drafting informational briefings for the Program website, developing mailings with Program updates, identifying key stakeholders and public participants, and developing a contact

database of these groups and individuals. In addition, the PAT makes public outreach recommendations to the Program Management Team (PMT) as needed.

The Bureau of Reclamation has designated two key contacts for public inquiries and updates. Jason Phillips, Interim Program Manager, and Margaret Gidding, Public Affairs Specialist with Reclamation's Mid-Pacific Region will field preliminary questions from the public. The public can contact the Program as follows:

Jason Phillips, Interim Program Manager

(916) 978-5033

jphillips@mp.usbr.gov

Margaret Gidding, Public Affairs Specialist

(916) 978-5104

mgidding@mp.usbr.gov

3 PUBLIC INVOLVEMENT AUDIENCES & RELATED PROGRAMS

3.1 AUDIENCES

The restoration of the San Joaquin River is a topic of interest to many. The public involvement process is targeted at involving those groups and individuals who have both a general interest in the River and those who may be actively interested in learning more and possibly sharing information, knowledge and opinions on the topic. The process is designed so that those who are a party to the Settlement, those affected by the Settlement, and those with a strong interest in fisheries, water supply, and water quality as well as the general public can take advantage of a number of opportunities for active participation in the Restoration Program.

Target audiences identified include:

- Parties to the Settlement and its implementation: the NRDC parties (14), Friant Water Users Authority parties (19), the U.S. Department of the Interior, and the U.S. Department of Commerce (see Appendix A for a complete list)
- Signatories to the Third-Party Memorandum of Understanding (see Appendix A for a complete list)
- Other government agencies, including cities and counties, other water districts and agencies, regional water quality control boards, regional government agencies, and federal agencies such as the U.S Army Corps of Engineers
- Landowners
- Fisheries and wildlife interest groups

- Farm organizations
- Environmental and public interest groups
- Recreational interest groups
- Water policy and planning groups
- Elected officials (Federal, State, local)
- Academic institutions, in particular, CSU Fresno, CSU Stanislaus, UC Merced, and UC Davis
- Media
- Businesses
- General public

The activities in the Public Involvement Plan are designed to increase awareness and understanding about the Program, provide mechanisms that will help information to be shared effectively, and establish ways to solicit and respond to stakeholder and public comments.

3.2 RELATED PROJECTS, PROGRAMS AND INFORMATION

Numerous fisheries, hydrology, habitat, channel and other technical studies, projects, and programs have been and are occurring with regard to the San Joaquin River. The Public Involvement Program will use and provide information about the programs and relationships to the Program and coordinate with these programs to provide additional opportunities for two-way communication. The related programs and activities in the San Joaquin Valley includes, but is not limited to, the following:

- San Joaquin River Restoration Studies – Friant/NRDC/Reclamation
- San Joaquin River Riparian Habitat Restoration Program Information – Reclamation
- Upper San Joaquin River Basin Storage Investigation – Reclamation and DWR
- San Joaquin River Conceptual Restoration Study – Resource Management Coalition
- San Joaquin River Parkway and Conservation Trust
- San Joaquin River Group (Vernalis Adaptive Management Program)
- San Joaquin River Management Program – DWR

4 PUBLIC INVOLVEMENT TOOLS

The following are examples of tools that are used to maintain communication between the implementing agencies and stakeholders, other agencies, and the general public.

4.1 MEETINGS AND WORKSHOPS

4.1.1 PUBLIC SCOPING MEETINGS

Public scoping meetings are held to both exchange information and receive official public comment. Public scoping meetings to identify basic issues and public hearings to receive formal comments are held according to NEPA/CEQA guidelines. Scoping meetings occur in strategic geographic locations around the Program area. Prior to each public meeting, paid advertisements are placed in the appropriate newspapers to inform the public of meeting dates and locations. In addition, meeting announcements are mailed to the list of interested stakeholders.

4.1.2 BRIEFINGS FOR EXECUTIVES, INTEREST GROUPS, COMMUNITIES AND LOCAL AGENCIES

Appropriate agency management will be briefed at Program milestones and by request through meetings and briefing packets. Outreach to and dialogue with interest groups is covered in a number of areas in the Public Involvement Plan, such as participation in stakeholder groups, access to information on the Program web site, distribution of printed information materials, and the attendance of interest group representatives at public meetings. Briefings for interest groups and communities surrounding the Program area and for local agencies with permitting authority occur at major Program milestones and as requested. These groups include environmental interests, civic organizations, recreational groups, chambers of commerce, and more.

4.1.3 STAKEHOLDER AND PUBLIC WORKSHOPS

Stakeholder and public workshops are held to provide an opportunity for input and dialogue with implementing agencies, entities that have facilities and properties, stakeholders and the general public. Early in the Program, workshops are an opportunity to present the Program Management Plan and Public Involvement Plan to interested parties. Workshop goals and objectives include securing input from directly impacted landowners, local and regional interests, and the general public in a variety of locations. These meetings provide opportunities for broad-based input to support the NEPA/CEQA process (e.g., scoping, information to support alternatives development) and secure input at key program milestones or decision points. The PAT will seek local organizations with whom to co-sponsor workshops.

4.1.4 REACH-BY-REACH COORDINATION MEETINGS

Facility and property owners in the five river reaches and several sub-reaches potentially impacted by the physical improvements and restoration program are engaged through reach-by-reach coordination meetings with the implementing agencies. These meetings provide focused opportunities for two-way dialogue to support key decisions, working with existing organizations, as appropriate.

4.1.5 STAKEHOLDER SUBGROUPS

Four Agency Technical Work Groups are established to carry out specific tasks to meet the Water Management Goal and the Restoration Goal identified in the Settlement:

- Water Management Work Group
- Fishery Management Work Group
- Engineering and Design Work Group
- Environmental Compliance and Permitting Work Group

These Agency Technical Work Groups will work with Stakeholder Subgroups including other agencies and stakeholders with specific knowledge and/or information in the technical areas and discuss Program progress and obtain specific technical input to achieve the goals of the Settlement. Stakeholder Subgroup meetings will be open to the public.

Examples of potential Stakeholder Subgroups include the following:

- Water Recapture Plan Subgroup
- Restoration Flow Guidelines Subgroup
- Fisheries Subgroup

Stakeholder Subgroup participants receive information via email and mailing lists and have access to the Program website.

4.2 PUBLIC INFORMATION

Accurate and timely information will be made available to the public and to stakeholders at all points of the restoration program. Some of the specifics may include the following activities.

4.2.1 PROJECT WEBSITE

A publicly accessible, Program-specific website will be a key outreach and input mechanism for the Program. It will offer timely information and updates, a document repository, a calendar of events/progress, and contact information. Most written material produced for the Program will be adapted for use on the website and the web will be publicized in all materials produced by the Program. The website will also be structured to solicit public comments at project milestones. The PAT will contribute to website content and help publicize its availability.

4.2.2 PUBLICATIONS

Written materials will be produced and distributed to keep interested persons informed of the restoration progress, water management updates, and the process of the efforts. Publications will be available in printed form and will be posted to the website. They will include:

- **Fact sheets** to provide general Program information as well as time- and stage-

- appropriate updates. These will be distributed at workshops, briefings, presentations, events, tours, and will be available at key site locations once river construction begins.
- **Newsletters** will provide interested audiences with updates on progress related to both the river restoration and the water management goals. The newsletters, issued quarterly and delivered electronically as well as posted on the project web site, will include:
 - Notices of public involvement activities, such as scoping meetings, workshops, presentations, tours and other
 - An overview of the Program environmental review process
 - A schedule of restoration activities on a phase-by-phase and reach-by-reach basis
 - Contact information, including the website, and ways to submit comments

4.2.3 PARTNERSHIPS

The Restoration Program will look for public outreach partnering opportunities with organizations that have expertise in and existing programs related to the San Joaquin River specifically, as well as restoration efforts, and water issues in general. Examples of these types of organizations include, but are not limited to, the San Joaquin River Parkway and Conservation Trust, Resource Management Coalition and the Water Education Foundation.

4.2.4 SPEAKERS BUREAU

Restoration efforts are very likely to generate interest among community, agricultural, governmental, environmental, business and academic groups, particularly in the counties along the River and served by Friant Dam water. A Speaker's Bureau representing the five agencies will be established to handle speaking requests. A Speaker Request Form will be developed to guide the Program in selecting the most appropriate and available speaker and presentation. The form will be available in printed form and also will be available on the Program website. The speakers will have available a Power Point presentation, updated to reflect the progress of restoration efforts, and will be trained in delivering the presentation and answering questions.

Additionally, the Program will seek out opportunities to present at conferences hosted by organizations such as Salmon Federation and the American Fisheries Society.

4.2.5 MAILING/EMAILING DATABASE

In order to provide targeted information to individuals and groups, the Program will actively maintain a contact database. More and more people are relying on email for communication and the Program make a particular effort at obtaining email as well as physical addresses. People will be able to submit contact information at meetings, on printed material, and on the website. Groups interested in having their members

receive updates may provide their member information in database format for inclusion in the database.

4.3 LANDOWNER COORDINATION

The San Joaquin River Restoration Program is unique in that it will involve access to, and in some cases construction on, property along all reaches in the 153-mile stretch from Friant Dam to the confluence of the Merced River. Long before any engineering and habitat activities take place, the Program will coordinate with land and facilities owners along the River. This effort is intended to clarify information about access needs while respecting the rights of the property owners. The coordination may take place in the form of electronic communications, small group meetings, phone calls to specific property owners, property owner access to a special section of the Program website, and other feedback mechanisms. The implementing agencies will emphasize developing partnerships with local organizations in conducting outreach to landowners.

4.4 MEDIA

A project with the significance of the San Joaquin River Restoration Program will be of interest to national, state and regional media. Materials on the website will provide background information and media contacts. Additionally, the Program will take advantage of the following:

4.4.1 NEWS RELEASES

The Program will issue news releases at significant milestones and for public notification of meetings.

4.4.2 MEDIA BRIEFINGS

When restoration activities reach significant points, the Program will initiate media briefings with regional media to bring key program staff, technical experts and media together to provide updates.

4.4.3 NEWSPAPER ADS

Newspaper ads will be placed in regional newspapers prior to official public scoping meetings.

4.4.4 MEDIA DATABASE

The Program will maintain a database of general regional, state, and specialized media, as well as organizational newsletters. Regional print and broadcast media and major California metropolitan media will be a conduit for reaching media in other states who monitor California media. Specialized media and newsletters will include publications such as:

- California Farm Bureau and county Farm Bureau publications
- Other farm and commodity group publications

- Water agency/organization publications
- Environmental and fisheries publications
- Public interest group publications
- Newsletters of affected parties and stakeholders
- Regional academic publications (e.g. CSU Fresno, UC Merced)

4.5 PUBLIC COMMENT AND RESPONSE MANAGEMENT

The Public Involvement Plan seeks to actively solicit information, resources, feedback, and opinions on key Program decisions from agencies, entities that have facilities or properties around the Program area, stakeholders and the general public. The Plan also seeks to ensure consistent, coordinated public involvement and outreach by the implementing agencies. A database and protocols for managing comments and responses will be developed to help track all comments received, responses returned, and status of comments.

A “Comment-Response” database will outline issues by category to help track all feedback received. The database will also track which entity or agency is responsible for resolving the comment and the status of the response. Implementing agency members of the Technical Work Groups and Public Affairs Team members will have access to the database to incorporate new feedback and to update the status field. A process for reporting back to commenting entities and/or public feedback reports will be developed per category to help track and move discussions forward.

5 PROJECT MILESTONES & PUBLIC INVOLVEMENT ACTIVITIES

5.1 STAGE 1 – PLANNING AND PROGRAM EVALUATION

The Settlement implementation strategy includes three stages. The first implementation stage focuses on formulating and evaluating reasonable alternatives and identifying significant data needs and analyses. Stage 1 includes the Programmatic NEPA/CEQA environmental review process, studies and consultations required for acquiring necessary program permits, and “feasibility-level” engineering, designs, and cost estimates of the Program alternatives, concluding in September 2009 with a Programmatic Environmental Impact Statement/Environmental Impact Report (PEIS/R) and a Record of Decision/Notice of Determination.

Public involvement activities for Stages 2 and 3 will be developed as details pertaining to key milestones are identified.

The following table describes the public involvement actions associated with the Program milestones described in Stage 1 implementation.

<u>2007</u>	<u>Program Milestones</u>	<u>Public Involvement Plan Actions</u>

April-June	Final Program Management Plan	<ul style="list-style-type: none"> • Finalize Public Involvement Plan • Initial Public Outreach, Briefings, and Information • Convene Stakeholder Subgroups
July-September	Scoping Report	<ul style="list-style-type: none"> • Ongoing Public Outreach, Briefings, and Information • Ongoing Subgroup Meetings • Public Scoping Meetings on Options • Reach-by-Reach Meetings
October-December		<ul style="list-style-type: none"> • Ongoing Public Outreach, Briefings, and Information • Ongoing Subgroup Meetings
<u>2008</u>	<u>Program Milestones</u>	<u>Public Involvement Plan Actions</u>
January-March		<ul style="list-style-type: none"> • Ongoing Public Outreach, Briefings, and Information • Ongoing Subgroup Meetings • Public Scoping Meetings on Alternatives • Reach-by-Reach Meetings
April-June	Stage 1 Program Alternatives Report	<ul style="list-style-type: none"> • Ongoing Public Outreach, Briefings, and Information • Ongoing Subgroup Meetings • Public Scoping Meetings on Alternatives • Reach-by-Reach Meetings
July-September		<ul style="list-style-type: none"> • Ongoing Public Outreach, Briefings, and Information • Ongoing Subgroup Meetings
October-December		<ul style="list-style-type: none"> • Ongoing Public Outreach, Briefings, and Information • Ongoing Subgroup Meetings

<u>2009</u>	<u>Program Milestones</u>	<u>Public Involvement Plan Actions</u>
January-March	Draft PEIS/R	<ul style="list-style-type: none"> • Ongoing Public Outreach, Briefings, and Information • Ongoing Subgroup Meetings • Public Meetings on Draft PEIS/R • Reach-by-Reach Meetings
April-June		<ul style="list-style-type: none"> • Ongoing Public Outreach, Briefings, and Information • Ongoing Subgroup Meetings
July-September	Record of Decision/Notice of Decision	<ul style="list-style-type: none"> • Ongoing Public Outreach, Briefings, and Information • Ongoing Subgroup Meetings • Public Meetings on ROD/NOD • Reach-by-Reach Meetings

**APPENDIX A: PARTIES TO THE SETTLEMENT,
SIGNATORIES TO SETTLING PARTIES
AND STATE OF CALIFORNIA
MEMORANDUM OF UNDERSTANDING,
AND SIGNATORIES TO THE THIRD
PARTY MEMORANDUM OF
UNDERSTANDING**

PARTIES TO THE SAN JOAQUIN RIVER SETTLEMENT

Agencies and organizations that are parties to the settlement in the San Joaquin River litigation known as Natural Resources Defense Council, et. al. v. Rodgers, et. al.:

PLAINTIFFS

Natural Resources Defense Council, The Bay Institute of San Francisco, Trout Unlimited of California, California Sportfishing Protection Alliance, California Trout, Friends of the River, Nor-Cal Fishing Guides and Sportsmen's Association, Pacific Coast Federation of Fishermen's Associations, San Joaquin Raptor Rescue Center, Sierra Club, Stanislaus Audubon Society Inc., United Anglers of California, California Striped Bass Association, and National Audubon Society.

FEDERAL DEFENDANTS

U.S. Department of the Interior (Bureau of Reclamation and U.S. Fish and Wildlife Service), U.S. Department of Commerce (National Marine Fisheries Service). (*Rodgers in the litigation's formal title refers to the current Mid-Pacific Regional Director of the Bureau of Reclamation, Kirk Rodgers.*)

FRIANT PARTIES

Arvin-Edison Water Storage District, Chowchilla Water District, Delano-Earlimart Irrigation District, Exeter Irrigation District, Friant Water Users Authority, Ivanhoe Irrigation District, Lindmore Irrigation District, Lindsay-Strathmore Irrigation District, Lower Tule River Irrigation District, Madera Irrigation District, Orange Cove Irrigation District, Porterville Irrigation District, Saucelito Irrigation District, Shafter-Wasco Irrigation District, Southern San Joaquin Municipal Utility District, Stone Corral Irrigation District, Teapot Dome Water District, Terra Bella Irrigation District and Tulare Irrigation District.

OTHER FRIANT DIVISION LONG-TERM CONTRACTORS

In addition to the Friant agencies named above, the parties below have water service contracts with the U.S. Bureau of Reclamation for Friant Division water supplies but are not parties to the litigation. The Settlement will apply to these agencies: City of Fresno, City of Orange Cove, City of Lindsay, County of Madera, Fresno County Waterworks District No.18, Fresno Irrigation District, Garfield Water District, Gravelly Ford Water District, International Water District and Lewis Creek Water District.

**SIGNATORIES TO SETTLING PARTIES AND STATE OF CALIFORNIA
MEMORANDUM OF UNDERSTANDING**

The agencies and organizations that are parties to the settlement in the San Joaquin River litigation known as Natural Resources Defense Council, et. al. v. Rodgers, et. al. (listed in attachment above) and the State of California are signatories to an MOU filed September 13, 2006.

SETTLING PARTIES AND STATE OF CALIFORNIA MOU SIGNATORIES

U.S. Department of the Interior (Bureau of Reclamation and U.S. Fish and Wildlife Service), U.S. Department of Commerce (National Marine Fisheries Service), Natural Resources Defense Council on behalf of itself and all other plaintiffs, Friant Water Users Authority, California Resources Agency, California Department of Water Resources, California Department of Fish and Game, California Environmental Protection Agency

**SIGNATORIES TO THE FEBRUARY 26, 2007 MEMORANDUM OF
UNDERSTANDING BETWEEN RECLAMATION AND THE
“THIRD PARTIES”**

Representatives of water users on the west side of the Central Valley; water users from tributaries to the San Joaquin River downstream of Friant Dam; the Exchange Contractors, who receive water from the Delta in lieu of water they would otherwise divert from the San Joaquin River below Friant Dam; and other parties concerned about river management issues are collectively known as the “Third Parties.”

THIRD PARTY MOU PARTIES

U.S. Department of the Interior Bureau of Reclamation, the San Joaquin River Exchange Contractors Water Authority, the Central California Irrigation District, the Firebaugh Canal Water District, the San Luis Canal Company, the Columbia Canal Company, the Merced Irrigation District, the Turlock Irrigation District, the Modesto Irrigation District, the Oakdale Irrigation District, the South San Joaquin Irrigation District, the San Joaquin Tributaries Association, the San Joaquin River Resource Management Coalition, the Westlands Water District, and the San Luis & Delta-Mendota Water Authority.

ATTACHMENT H

SJRRP STAGE 1 PROCESS SCHEDULE

San Joaquin River Restoration Program Stage 1 Process Schedule

TIMELINE		Program Level	Key FMW & WMG Deliverables	Work Group/Subgroup Meetings and Public/Stakeholder Process	Restoration Administrator		
2007	Apr	Final Program Management Plan			Public Process and Public Workshops		
	May						
	Jun	NOI/NOP			Public Process and Public Workshops		
	Jul						
	Aug		Draft Existing/Future Project Conditions TM		Public Process and Public Workshops		
	Sep		Draft Water Management & Fisheries Options TM's				
	Oct	Draft Scoping Report			Public Process and Public Workshops	Make Program Recommendations to Secretary	
	Nov			Work Group & Subgroup Meetings			
	Dec		Draft Initial Restoration Flow Guidelines TM		Public Process and Public Workshops	Annual Program Report	
	Jan						
	Feb				Draft Development of Initial Alternatives and Conceptual Model TM's	Public Process and Public Workshops	
	Mar						
Apr		Initial Program Alternatives Report	Draft Restoration Flow Guidelines TM		Public Process and Public Workshops		
May							
Jun					Public Process and Public Workshops		
Jul							
Aug					Public Process and Public Workshops		
Sep			Draft Fish Management Plan				
Oct		Final Draft Program Alternatives Report	Draft Plan Formulation TM			Public Process and Public Workshops	
Nov					Recommend Implementation of 2009 Interim Flows Program		
Dec			Final Fish Management Plan		Public Process and Public Workshops	Annual Program Report	
2009	Jan		Administrative PEIS/R				
	Feb				Public Process and Public Workshops		
	Mar	Draft PEIS/R					
	Apr				Public Process and Public Workshops		
	May						
	Jun				Public Process and Public Workshops		
	Jul	Final PEIS/R					
	Aug				Public Process and Public Workshops		
	Sep	ROD/NOD					
	Oct	Initiate Interim Restoration Flows					