Appendix A

Program Accomplishments as of June 2015

SAN JOAQUIN RIVER
RESTORATION PROGRAM

July 2015

Program Accomplishments as of June 2015

Below is a summary of the accomplishments of the San Joaquin River Restoration Program (SJRRP) by major activity as of June 2015.

Administration and Program Management:

Action Completed	**Date Completed**	**Purpose – Why important?**
Program Management Plan (PMP)	May 2007	The PMP describes the approach the Implementing Agencies are using to implement the Settlement in *NRDC v Rodgers* (Settlement). The three primary purposes are: 1) to help guide the Implementing Agencies; 2) to inform the other Settling Parties and the public; and 3) to help assure the all Settlement terms are being addressed and successfully implemented.
Public Involvement Plan (PIP)	May 2007	The PIP was developed as a stand-alone document and as an appendix to the PMP. The goal was 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 and participate in Program activities and progress.
Annual Reports	Yearly since 2007	Annual report on Program status, funding, progress, outreach, accomplishments and outlook for the coming year's activities. The Annual Report is called for in the PMP.
Quarterly Program Updates	Since Oct. 2007; target is quarterly	A 4-page update on Program activities, upcoming involvement opportunities, and other relevant information to a mailing list of approximately 3,400; also posted on the web.
Funding for the U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS)	Yearly since 2007	Reclamation provides funding for USFWS and NMFS to participate in the Program. This funds many of the "planning" fish reintroduction actions identified below. Any fish studies are funded under the flow-related activities activity below.
Program-wide Regulatory Compliance Tech Memo	November 2007	Provides a broad-reaching view of all regulatory compliance needed for the Program over its implementation and the procedures for interaction with regulatory agencies.

Administration and Program Management:

Action Completed	Date Completed	Purpose – Why important?
Negotiated and executed new 9(d) contract with the willing Friant Division long-term contractors	2010	Required under PL 111-11 Section 10010. Provided a funding source for the Restoration Program as contractors that executed repayment contracts paid either in lump sum or over 4 years. All funds collected were deposited into the San Joaquin River Restoration Fund.
SJRRP Funding Information for Fiscal Year (FY) 2007 to 2011	February 2012	Provided detailed documentation of funds spent on the Program from FY 2007 to FY 2011.
Program Biological Opinions (BOs)	January 2012	Biological opinions from both NMFS and USFWS for Endangered Species Act (ESA) listed species under their purview for all Program actions, including coverage on a project-level for releases of Interim and Restoration flows up to 1,660 cubic feet per second (cfs) release from Friant Dam. Actions covered at a program-level will require additional consultation as specific construction projects are developed. However, the Program BOs provide guidance on approach and mitigation requirements for these future projects.
Program Environmental Impact Statement/Report (PEIS/R) and Record of Decision	September 2012 and October 2012	Provided National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) compliance for all Program actions at a program-level or broad coverage. Provided NEPA and CEQA compliance for Interim and Restoration Flows as a project-level of detail. PEIS/R is only NEPA compliance necessary for flows. No NEPA or CEQA litigation on the document.
Working Draft Implementation Framework	June 2012	Provided a new schedule and budget for the Program considering the current state of the channel and structural improvement projects.
Modification to Reclamation's Water Rights to Implement the SJRRP	September 2013	Permanently modifies Reclamation's water rights at Friant Dam to implement the Restoration Program. Adds fish and wildlife purposes, places of use, points of rediversion, and purposes of use.

Administration and Program Management:

Action Completed	Date Completed	Purpose – Why important?
Annual Work Plans	Since FY 13 to present; annually	Fulfills requirement from the Program Record of Decision, providing estimated budgets and outlines for Program activities to be undertaken in each fiscal year. Developed in coordination with the Settling Parties and Third Parties.
Lower San Joaquin Regional Flood Planning Efforts	Ongoing since 2013	Working with Lower San Joaquin Levee District and local entities to coordinate State flood planning efforts related to the Central Valley Flood Protection Plan, Regional Flood Management Plans, and Basin-Wide Feasibility Studies with Program efforts.

Paragraph 11 – Channel and Structural Improvement Projects:

Action Completed	Date Completed	Purpose – Why important?
Mendota Pool Bypass and Reach 2B Channel Improvements Project		
Public Scoping and Scoping Report	February 2010	Provided the public, stakeholders, Indian tribes, and other interested agencies early input into the scoping of the project; helping determine the range of alternatives to be evaluated, the potential environmental effects, and possible mitigation measures to be considered in the project's environmental document as part of the NEPA and CEQA environmental review process.
Existing Conditions Tech Memo	March 2010	Identified environmental data and surveys needed to complete the resource area sections in the project's EIS/R and supported the permit applications necessary to implement the project.
Initial Options Tech Memo	April 2010	Documented the process for formulating preliminary options to implement the project.
Analytical Tools Tech Memo	October 2010	Documented the approach for analyzing the initial alternatives and assessing the resource areas for the project.

Paragraph 11 – Channel and Structural Improvement Projects:

Action Completed	Date Completed	Purpose – Why important?
Regulatory Compliance Tech Memo	August 2011	Identified permits and approvals required for implementing the project and described a comprehensive and coordinated approach to obtaining the necessary permits and approvals.
Environmental Field Surveys and Tech Memo	November 2011	Provided biological background information and survey results needed to support the resource area sections in the project EIS/R and supported the permit applications necessary to implement the project, including the Biological Assessment.
Project Description Tech Memo	October 2012	Documented the process and results of the draft and final alternatives formulation to implement the project.
First and Second Administrative Draft Environmental Impact Statement/Report	January 2015	Working documents that lead to the preparation of the public Draft Environmental Impact Statement/Report.
Public Draft Environmental Impact Statement / Report	June 2015	Public Draft of the National Environmental Policy Act and California Environmental Quality Act environmental compliance. Includes a preferred alternative based on landowner input.
Design	In progress	Currently have completed the 10 percent design. Also completed a series of design technical memorandum and additional analysis to address landowner and stakeholder concerns.
Design Data Collection	In progress	Largely completed the geotechnical and soils design data collection including barge drilling in Mendota Pool. Samples are currently under analysis.

Paragraph 11 – Channel and Structural Improvement Projects:

Action Completed	Date Completed	Purpose – Why important?
Reach 4B, Eastside Bypass, and Mariposa Bypass Channel and Structural Improvements Project		
Public Scoping and Scoping Report	July 2011	Provided the public, stakeholders, Indian tribes, and other interested agencies early input into the scoping of the project; helping determine the range of alternatives to be evaluated, the potential environmental effects, and possible mitigation measures to be considered in the project's environmental document as part of the NEPA and CEQA environmental review process. Met all necessary requirements for scoping for alternatives to begin the EIS/R process.
Initial Alternatives Tech Memo	October 2011	Provides a breakdown of initial alternatives considered in association with the project and provides a general analysis of the merits and drawbacks of each.
Public stakeholder meetings throughout the life of the project	Ongoing	Provides updates on technical analysis and alternatives development – open to the general public, stakeholders, and landowners.
Quarterly meetings with the San Luis National Wildlife Refuge staff	Ongoing	Provides updates and discussion with the Refuge staff about the project as well as other SJRRP projects of interest to the Refuge (including the El Nido Road Sand Removal Project, general information on Interim and Restoration Flow releases, and coordination of study activities on Refuge land).
Arroyo Canal Fish Screen and Sack Dam Fish Passage Project		
60 Percent Design	April 2012	Detailed design drawings for the project.
Cultural Resources Surveys	October 2012	Backhoe test pits were dug and cultural resources staff analyzed soils to determine the presence or absence of cultural resources to comply with Section 106.
Design-Level Geotechnical Analysis and Borings	October 2012	Geotechnical borings were dug to aid in the design analysis for the Arroyo Canal Project.
National Historic Preservation Act (NHPA) Section 106 Completion	February 2013	Completion of Section 106 consultation and review with California State Historic Preservation Officer.
Biological Opinion	August 2013	Provides minimization and avoidance measures for ESA-listed species and essential fish habitat under NMFS' purview as well as providing required measures for project construction.

Paragraph 11 – Channel and Structural Improvement Projects:

Action Completed	Date Completed	Purpose – Why important?
Final EA and FONSI	September 2013	Provides NEPA and CEQA compliance for the project.
Subsidence Efforts	Ongoing	Preparation of draft subsidence design memorandums (currently unreleased to the public) and coordination of subsidence concerns with the San Luis Canal Company and Lower San Joaquin Levee District along with the local water districts in the area. Continued twice yearly subsidence monitoring at over 50 stations around the SJRRP Restoration Area including at Sack Dam. Conducted two surveys and trained San Luis Canal Company staff on surveys along the Arroyo Canal.
Salt and Mud Slough Barrier Project		
Draft Project Management Plan and Initial Project Efforts	September 2013	Began initial project efforts including preparing a draft Project Management Plan, beginning the NEPA and CEQA compliance and beginning the initial design efforts. These efforts were put on hold in 2013 as the project is a low priority.
Gravel Pit Filling and Isolation		
2-Dimensional Modeling Effort	2012	Prepared a 2-dimensional water temperature model to assist in the future prioritization of gravel pit projects based on relative priority for reducing juvenile salmon mortality.
Gravel Pit Studies	2013 – Present	California Department of Fish and Wildlife's (DFW) and California Department of Water Resources are conducting various monitoring studies on predation, bathymetry, and temperature in the gravel pits to prioritize the highest priority pits for possible isolation or filling.

Paragraph 14 – Reintroduction of Salmon:

Action Completed	Date Completed	Purpose – Why important?
10(a)(1)(A) Permit application for Spring-run Salmon Broodstock Efforts, and Revised Permit and Permit Issuance	September 2010, December 2011, and October 2012	Allowed for the collection of spring-run Chinook salmon from the Feather River Hatchery for the Program's broodstock efforts.
Stock Selection Strategy	November 2010	Identified a multi-step process to select a stock or stocks of spring-run Chinook salmon for reintroduction to the San Joaquin River and ultimately determine appropriate methods of reintroduction.
Fish Management Plan (FMP)	November 2010	The FMP lays out a structured approach to adaptively manage the reintroduction of Chinook salmon and other fishes.
Hatchery and Genetics Management Plan (HGMP)	December 2010	The HGMP provides guidance on the management and operation of the Program's Conservation Facility and describes the manner in which donor stock would be propagated. It was required for NMFS to issue the 10(a)(1)(A) Permit for broodstock efforts.
Reintroduction Strategy for Spring-run Chinook Salmon	February 2011	This document provides additional details on the approach and methods for reintroducing spring-run Chinook salmon.
Evaluation of the Hills Ferry Barrier Effectiveness Study and Final Report	October 2011	Requirement of PL 111-11 Section 10004(h)(4). Reclamation TSC biologists evaluated the effectiveness of Hills Ferry Barrier in preventing the unintended upstream migration of anadromous fish in the San Joaquin River.
Minimum Floodplain Habitat Area for Spring and Fall-run Chinook	November 2012	This study recommends a minimum amount of juvenile rearing habitat necessary to meet fall- and spring-run Chinook salmon targets for the Restoration Program.
Appraisal Study for Water Supply to Conservation Facility	May 2013	Reclamation studied how to deliver 20 cfs from Friant Dam to DFW's planned Salmon Conservation and Research Facility. This study enables Reclamation to move forward with the design process, and facilitates more detailed coordination with proponents of related projects including Orange Cove Irrigation District, Friant Power Authority, and Fresno County Water Works District #18.

Paragraph 14 – Reintroduction of Salmon:

Action Completed	Date Completed	Purpose – Why important?
EA, FONSI, and Financial Assistance Agreement for Operations and Maintenance (O&M) Funding for the Conservation Facility	October 2013; October 2014	Reclamation's February 2011 letter of intent to fund Conservation Facility O&M for 10 years enabled DFW to obtain State approvals to proceed with planning and design. Reclamation completes financial assistance agreements for the O&M funding annually, and completed an EA analyzing actions through December 31, 2015.
Design for the Additional Water Supply Need for the Conservation Facility	On-going	Currently working on the design for modifications to the outlet works at Friant Dam to be able to provide an additional 20 cfs to the Conservation Facility. Currently at the design at the 10 percent design level.
Began Spring-run Salmon Broodstock Efforts	Began March 2013; ongoing	The first year of broodstock was collected in 2013. These fish were transported to the Program's Interim Facility and in spring 2017, their offspring will be the first "large" release of spring-run salmon into the San Joaquin River in more than 60 years. Broodstock has been transported to the Interim Facility each year since 2013.
Fall-run Trap & Haul Study	Began December 2012; ongoing	This study effort includes the trap and transport of fall-run Chinook salmon from the lower river and the release of these fish into Reach 1, about 30 miles downstream of Friant Dam. The study is intended to see if fall-run can successfully spawn in the river. Naturally spawned salmon were found in spring 2013. This was the first documented successful natural spawning in the river in more than 60 years. Successive years of the study provide valuable information on spawning location and spawning success.
Genetics Monitoring	Began 2013; Ongoing	Awarded an Interagency Agreement to NMFS Science Center to complete genetics monitoring of our spring-run salmon broodstock and spring-run salmon direct releases. Monitoring efforts are completed annually.
Annual Brood Year Fisheries Implementation Plans	Began 2013; Ongoing	Describes and coordinates the fall-run and spring-run salmon actions for the year.

Paragraph 14 – Reintroduction of Salmon:

Action Completed	Date Completed	Purpose – Why important?
ESA 10(j) and 4(d) rule package	December 2013	Allows for the take of spring-run Chinook salmon for certain activities in specific areas. Provides protections to third parties from potential liability under the Federal and State ESA for reintroduced spring-run salmon.
Annual Tech Memos for the Take of Spring-run Salmon at the Central Valley Project (CVP) and State Water Project (SWP) facilities	January 2014; annually thereafter	Identifies how the SJRRP spring-run salmon will be accounted for at the CVP and SWP Delta facilities.
Direct release of spring-run salmon into the River	Began Spring 2014; ongoing	First direct release of spring-run salmon into the San Joaquin River in many decades. These study efforts are targeting smaller releases of spring-run salmon in the hopes that some return to the San Joaquin River as adults. If they do, additional study activities will be undertaken, including moving these fish to Reach 1 to see if they can successfully over-summer and spawn the following fall. These are important activities to test the viability of spring-run salmon in the San Joaquin River.

Paragraph 13 and 15 – Flow Related Activities:

Action Completed	Date Completed	Purpose – Why important?
Initial releases of Interim Flows	Began October 2009; ended December 31, 2013	Initiated Interim Flows in October 2009 and completed them on the schedule outlined in the Settlement.
Annual flow management activities	Annually from 2009	Series of annual activities as described in the Restoration Flow Guidelines to release, manage, and account for Restoration Flows. Includes extensive coordination with the Restoration Administrator and downstream interests, including Exchange Contractors Water Authority, San Luis & Delta-Mendota Water Authority, Central California Irrigation District and San Luis Canal Company.

Paragraph 13 and 15 – Flow Related Activities:

Action Completed	Date Completed	Purpose – Why important?
Water Quality Monitoring during Interim Flows	October 2009 to December 2013	Water rights orders for Interim Flows had required water quality monitoring for a range of constituents in the newly re-wetted San Joaquin River. The monitoring included laboratory analysis of grab samples from the river as well as monitoring of real-time water quality gages placed in the river.
Seepage Management Plan and updates	September 2009; Last update was September 2014	Allows for the release of Interim and Restoration Flows without causing material adverse groundwater seepage impacts, protecting adjacent landowners.
Seepage Project Handbook and updates	December 2011; Last update was September 2014	Details process for realty actions or construction of physical seepage projects to allow increased flows without damaging adjacent crops.
Installation of more than 200 Seepage Monitoring Wells and weekly monitoring actions	Wells installed starting in 2009; efforts ongoing	Limits Interim and Restoration Flows in real-time to levels that do not cause impacts to adjacent crops.
Installed stream gages to monitor Interim Flows	September 2009; ongoing monitoring	Provides instream flow data to inform the creation of the Program's Restoration Flow Guidelines (Settlement Paragraph 13).
Yearly EAs and FONSIs for Interim Flows	Annually from 2009 to 2012	Provided NEPA compliance for the continued release of Interim Flows.
Yearly Biological Opinions from NMFS and USFWS for Interim Flows	Annually from 2009 to 2012	Provided ESA compliance for the continued release of Interim Flows.
Temporary Change to Reclamation's water rights to release Interim Flows	2010, 2011, and 2012	Provided changes to Reclamation's water rights at Friant Dam for the continued release and protection of Interim Flows.
EA, FONSI, and Purchase of Gates for Sack Dam	August 2010	Provided funding to the Henry Miller Reclamation District to purchase automatic gates to allow the District to more efficiently and safely pass SJRRP Flows past their dam.
EA, FONSI and Purchase of Gates for Mendota Dam	December 2011	Provided funding to Central California Irrigation District to purchase automatic gates to allow the District to more efficiently and safely pass SJRRP Flows past their dam.

Paragraph 13 and 15 – Flow Related Activities:

Action Completed	Date Completed	Purpose – Why important?
EA, FONSI, and Financial Assistance Agreement for Invasive Vegetation Monitoring and Management	October 2012	In the successive Interim Flows EAs and the PEIS/R, Reclamation committed to monitor and manage invasive species with the potential to compromise successful implementation of the SJRRP. NEPA was completed for this effort and a financial assistance agreement was entered into with the San Joaquin River Parkway and Conservation Trust, who is performing management and monitoring of invasive plants with River Partners.
Monitoring and Analysis Plan (MAP) and Associated Studies	Ongoing, Annually since 2011	Since 2011, the Implementing Agencies have annually produced the MAP to identify how the SJRRP will resolve uncertainties associated with flow scheduling, channel improvements, and fisheries reintroduction actions. The data from the studies that are part of the MAP help to inform multiple aspects of the SJRRP implementation. These studies have included fish monitoring and tracking of survival, habitat analyses, temperature monitoring, egg survival studies, water quality monitoring, river cross section surveys, mine pit predation, geotechnical analysis of levees, sediment monitoring, vegetation monitoring, fish passage analyses, trap and haul of salmonids, fish assemblage monitoring, captive fish rearing, genetic studies, and other modeling efforts. This also includes all permitting necessary for the implementation of these projects, including Corps 404 permits, Section 10 permits, 401 Water Quality Certifications, ESA compliance, and Section 106 review and concurrence.
Resolved Tort Claim with Mr. Nickel	June 2012	Prevented Federal Court of Claims action, compensated landowner for restriction of drainage to the river.

Paragraph 13 and 15 – Flow Related Activities:

Action Completed	Date Completed	Purpose – Why important?
Steelhead Monitoring Plan (monitoring actions ongoing)	July 2012; annual monitoring	Reclamation committed to developing and implementing a monitoring plan for Central Valley steelhead that may enter the Restoration Area during Interim and Restoration flows. The plan includes the notification of NMFS in the event of encountering any steelhead and a relocation and recovery mechanism to place these fish downstream until such time as conditions are sufficient to sustain steelhead in the Restoration Area with minimal risk of injury or mortality.
Draft Guidance document on Management of Unreleased Restoration Flows	September 2013	Provides guidance to Reclamation on how to best manage Unreleased Restoration Flows, which became available on January 1, 2014, to best achieve the Restoration Goal.
Channel Capacity Report – 2014 and 2015 Restoration Year	September 2013; January 2015; Annually	Meets requirements in the PEIS/R ROD to identify then-existing channel capacities and manage Interim and Restoration Flow releases such that they do not exceed these amounts.
Restoration Flow Guidelines	December 2013	Fulfills Program requirements under Settlement Paragraph 13(j) to develop guidelines for releasing Restoration Flows in support of the Program's Restoration Goal. Culmination of more than 4 years of monthly negotiations with Friant and NRDC.
Restoration Flow Releases	Began January 1, 2014	Began Restoration Flow releases on the schedule identified in the Settlement.
Seepage Projects – Completion of First 2 Seepage Projects, an Easement and Fee Title Purchase	November 2014	Completed the SJRRP's first two seepage projects – a seepage easement on 4,500 acres and a fee title purchase of 400 acres. These two projects address 20 percent of the about 23,000 acres potentially impacted by the SJRRP flows. This was a substantial accomplishment for the Program.

Paragraph 13 and 15 – Flow Related Activities:

Action Completed	Date Completed	Purpose – Why important?
Sale of Unreleased Restoration Flows; Unreleased Restoration Flow Agreements	February 2014	At that time and due to the severe drought, the parties to the Settlement agreed to shut off Restoration Flows into the San Joaquin River early and sell the resulting Unreleased Restoration Flows. Reclamation sold a total of 11,219 acre-feet (AF). We gave first priority to the Friant Contractors with human health and safety needs and sold 1,824 AF to them at $100/AF. The rest of the water was intended for critical agricultural needs and we allocated it by Class 1 contract percentage to each Friant Contractor. Contractors were allowed to take delivery of the water and use in district or transfer to a district with a long-term relationship at cost. No transfer or sales of the water on the open market were allowed as the water was intended to meet the crucial agricultural needs in the Friant Division. Water not purchased by contractors was turned back to Reclamation and sold to other Friant Contractors. We sold 9,395 AF to them at $350/AF. In total in 2014, we sold a total of 11,219 AF and generated $3,470,650 for the San Joaquin River Restoration Fund.
Final EA for Fresno Irrigation District's Temporary Pumping Facility	March 2014	Provided NEPA compliance for FID's temporary pumping facilities to allow for the return of previously banked Unreleased Restoration Flows.
Groundwater Flow Modeling for the San Joaquin River Restoration Program	October 2014	Groundwater model – SJRRPGW - developed by the USGS to allow for the prediction of groundwater movement near the San Joaquin River as a result of the SJRRP activities.
Flowage Easements in the Eastside Bypass	2013 - 2015	Reclamation has obtained 8 required flowage easements in the Eastside Bypass to allow SJRRP flows to flood private property.
Lower San Joaquin Levee District Financial Assistance Agreement	2011	Reclamation has provided funding to the Levee District to assist it in changing its operations to occur in the wet and adapting to the newly re-wetted San Joaquin River.

Paragraph 16 (Water Management Goal):

Action Completed	Date Completed	Purpose – Why important?
Program for Recapture and Recirculation of SJRRP Flows	Began October 2009; ongoing	The SJRRP implements a robust program, in coordination with the Friant Contractors, to recapture and recirculate as much of the SJRRP Flows as possible. Of the about 742,000 that has been released for the SJRRP and eligible for recapture, over 286,000 has been recirculated to the Friant Contractors.
Water Management Technical Feedback Meeting	Quarterly	Updates on the status of the Water Management Goal are provided by Reclamation to the Friant Contractors, other Settling Parties, Third Parties, and members of the public. Provides an opportunity to keep the parties informed of activities and solicit feedback to improve achievement of the Water Management Goal.
EA and FONSI for Recirculation of WY2010 Interim Flows	July 2010	Provided for the Recirculation of Recaptured WY2010 Interim Flows.
EA and FONSI for Recirculation of WY2011 Interim Flows	June 2011	Provided for the Recirculation of Recaptured WY2011 Interim Flows.
EA and FONSI for Recirculation of WY2012 Interim Flows	April 2012	Provided for the Recirculation of Recaptured WY2012 Interim Flows.
Recovered Water Account – Allocation of Credits	2011	In 2011 and due to the high flow conditions, Reclamation allocated 680,440 acre-feet of Recovered Water Account credits based on projected future water supply impacts. The Friant Contractors took delivery of over 482,000 AF.
Recapture agreements in Mendota Pool for December 2012 through April 2013	December 2012	Provided for the recapture of Interim Flows in Mendota Pool that would have otherwise been abandoned and not available for recapture and recirculation by the Friant Contractors.
EA and FONSI for Recirculation of WY 2013 to 2017 Interim and Restoration Flows (SJRRP Flows)	April 2013	Provides for the Recirculation of Recaptured WY2013 to WY2017 SJRRP Flows.
EA and FONSI for 1-year Transfer to Red Top Area	April 2013	Provides Madera Irrigation District and Chowchilla Water District with the ability to maximize its pro-rata share of recaptured SJRRP Flows and best achieve the Water Management Goal.

Paragraph 16 (Water Management Goal):

Action Completed	Date Completed	Purpose – Why important?
Recapture agreements in Mendota Pool for November 2013 through April 2014	October 2013	Provided for the recapture of Interim Flows and Restoration Flows in Mendota Pool that would have otherwise been abandoned and not available for recapture and recirculation by the Friant Contractors.
Recovered Water Account – Methodology for Determining Water Supply Impacts	December 2013	Agreed to a methodology between Friant and NRDC on how to determine water supply impacts of the Restoration Program. This effort took more than 4 years of intensive negotiations among the parties and extensive modeling by Reclamation staff.
Investment Strategy for the SJRRP Water Management Goal	March 2015	Evaluates and ranks projects that can help achieve the Water Management Goal. Also will provide information to assist identification of necessary measures and funding requirements to implement recirculation, recapture, reuse, exchange, or transfer of Restoration Flows.

Friant Division Improvements – Part III of Title X, Subtitle A of PL 111-11:

Action Completed	Date Completed	Purpose – Why important?
Friant-Kern Canal Capacity Restoration Project		
Draft Feasibility Study and EA	June 2011	Provides for the recommendation to restore approximately 58 miles of the capacity of the Friant-Kern Canal. This will allow for additional water to be delivered to the Friant Contractors in wet years and reduce their impacts that may occur from implementation of the SJRRP Flows.
Biological Assessment	October 2013	Meets ESA requirements for construction of the Friant-Kern Canal Capacity Restoration Project
Design	Ongoing	Currently at the 60 percent design level. Completed a series of design reviews to try to reduce costs and extend project benefits.

Friant Division Improvements – Part III of Title X, Subtitle A of PL 111-11:

Action Completed	Date Completed	Purpose – Why important?
Madera Canal Capacity Restoration Project		
Initiation of Demonstration Project	October 2012	Purpose is to complete demonstration projects to aid in the development of alternatives for the Madera Canal feasibility study.
Feasibility Study and NEPA compliance	Began 2013; ongoing	Currently preparing a feasibility study and NEPA document that assesses the restoration of the capacity of the Madera Canal.
Friant-Kern Canal Pump-back Project		
Acquisition of pumps and motors from Temporary Red Bluff Pumping Plant	2014	Acquired pumps from the Red Bluff facility and move them to Friant's storage facility. This will provide a tremendous cost savings for this project as compared to purchasing new equipment.
Feasibility Study and NEPA compliance	Began 2015; ongoing	Currently preparing a feasibility study and NEPA document that assesses the installation of the Red Bluff pumps in the Friant-Kern using drought relief funding.
Part III Financial Assistance for Groundwater Banking Projects		
Guidelines for the Application of Criteria Projects	August 2012	Provides guidelines for obtaining Federal financial assistance for Friant Division groundwater recharge and/or banking projects as authorized by Part III. The Guidelines address the contents of a complete funding application, cost-share agreement, and financial assistance process.
Awarded $10 Million in Financial Assistance under Part III	September 2013	The four groundwater banking projects will receive $14.3 million of the $50 million available under Part III when fully funded. The selected projects are projected to yield 760,000 acre-feet of water / 493,000 RWA during their 30-year project life cycle.

Viability Study:

Action Completed	Date Completed	Purpose – Why important?
Chowchilla Bypass Viability Study	2013	Completed an administrative draft technical memorandum on the potential use of the Chowchilla Bypass for the SJRRP. The document was never finalized as Reclamation did not find the use of the Chowchilla Bypass viable and stopped efforts on this project.

Wolfsen v US:

Action Completed	Date Completed	Purpose – Why important?
Technical Assistance for the Wolfsen v US case	2014	Provided technical assistance to the Office of the Solicitor and the Department of Justice in the Wolfsen v. US case.